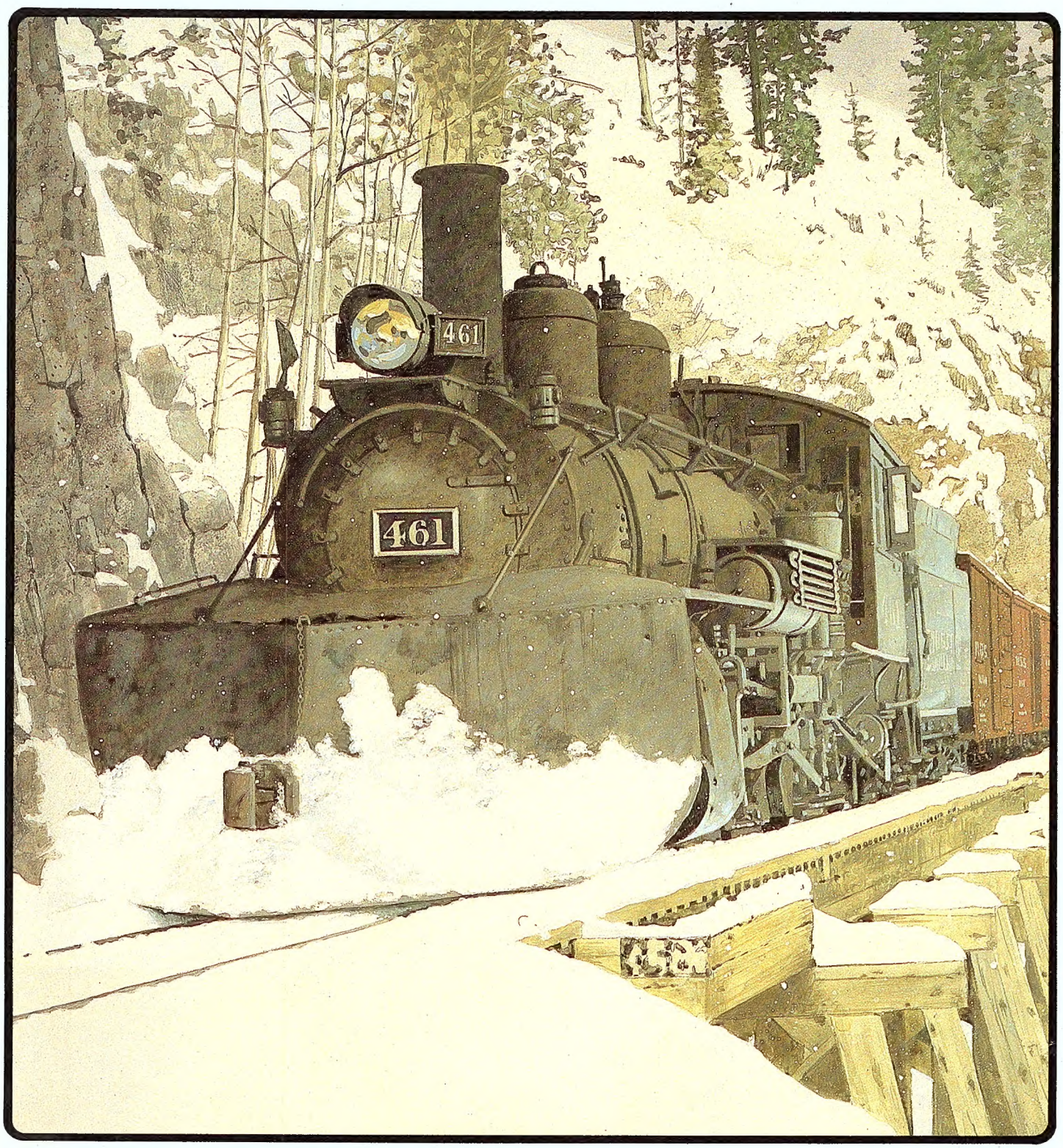
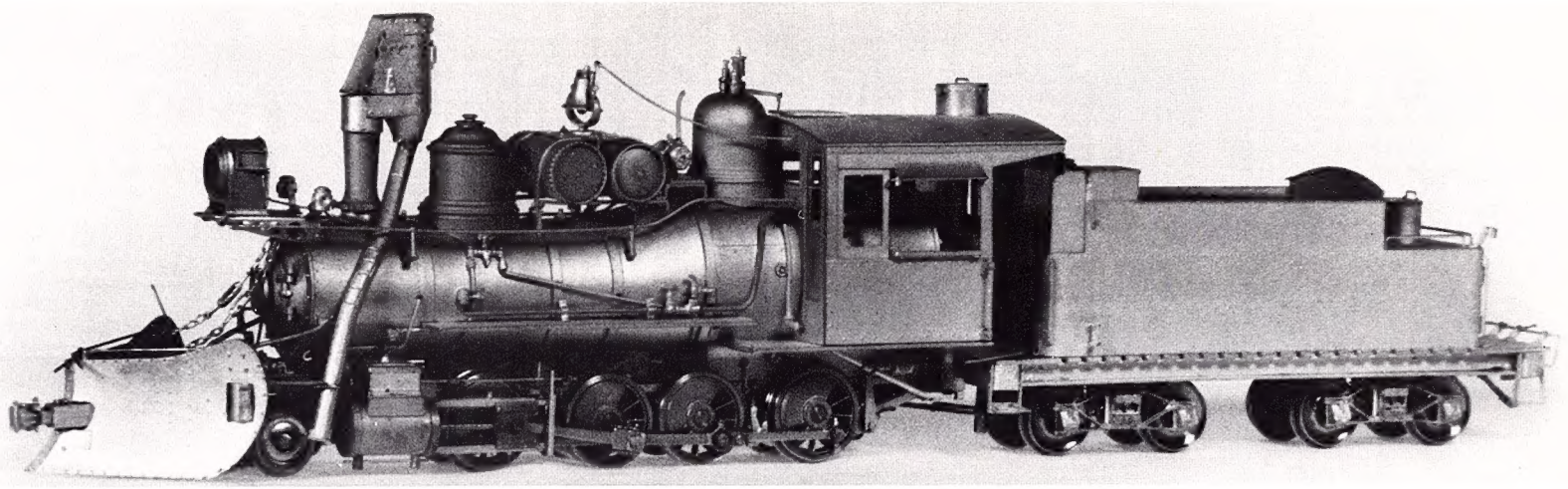
NARROW GAUGE AND SHORT LINE GAZETTE

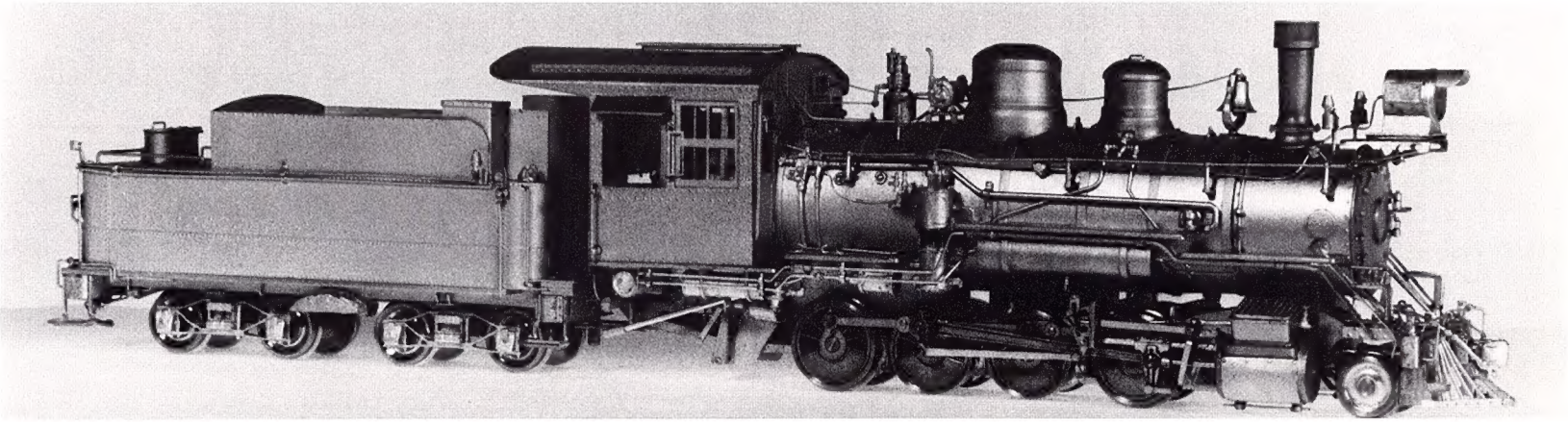
Accurate Information for Fine Modelbuilding - Jan/Feb 1986 $3.25





COLORADO & SOUTHERN Class "B4C" 2-8-0 #60 **OMI #1708**

This Rhode Island built locomotive started out life in 1886 on the Denver, South Park & Pacific and worked passenger service out of Denver to Como, Colorado.



RIO GRANDE SOUTHERN Class "B4F" 2-8-0 #74 **OMI #1711**

Built by Brooks in 1898 for the Colorado & Northwestern as their number 30, then to the Boulder & Western also as number 30, then to the Colorado & Southern in 1921 as number 74, and finally to the Rio Grande Southern in 1948, retaining the number 74. The C&S number 74 version of this fine model will be available in December 1985 as OMI #1710.

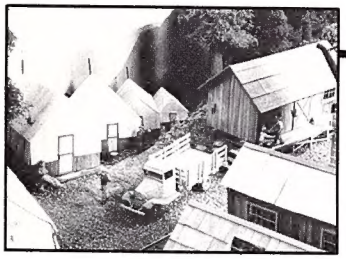
Our Colorado & Southern 2-8-0's are the most accurate models built, regardless of scale . . . check them out, you'll agree! These locomotives offer the largest (#74) and the smallest (#60) C&S narrow gauge steam. Both of these models will feature the hinged "Ridgeway Spark Arrester," opening boiler fronts, sprung drivers and a host of other accurate details. Built by M. S. Models of Korea in Sn3 scale. Also, check out our complete line of C&S wood cabooses.

Overland Models, Inc.

5908 Kilgore Avenue, Muncie, IN 47304

NARROW GAUGE AND SHORT LINE GAZETTE

JANUARY/FEBRUARY 1986 VOLUME 11, NUMBER 6



SPECIAL FEATURE

42 **Building Yosemite Sugar Pine Lumber Company Camp 17, Part 1**
Logging in HO Scale.
by Jack Burgess

FEATURES

18 **Narrow Gauge Scene**
Narrow Gauge in Paradise.
by Charlie Getz

22 **An Sn20 Porter 0-4-4T**
Copper hauler.
by Michael W. Conder

24 **Copper in the Mountains, Part 1**
Desert narrow gauge.
by Michael W. Conder

32 **An HOn30 Forney**
A Shetland dream.
by Garry Ceronne

36 **U.S. Army Narrow Gauge Railroads in the Columbia River Area**
Spit and polish.
by Charles S. Small

48 **A ½-Inch Scale, 18-Inch Gauge "Porter"**
Small is big.
by Randall Sauter

52 **Ore Processing, a Modelers Perspective: Part 11**
Modeling the gravity stamps.
by John Hitzeman

56 **The Sawmill Chronicles, Part 10**
The boiler.
by Reg Shaffer

58 **Building Caboose #0505**
Brass Lantern Award.
by Bill Florent

61 **Up Clear Creek on the Narrow Gauge, Part 36**
The Georgetown station.
by Harry Brunk

67 **Snowplowing Over Diablo Pass**
Sn3 madness.
by Paul Scoles

72 **A Welsh Slate Quarry Locomotive Facility**
Detail in a teacup.
by Jerrold R. Kinney

75 **Modelmakers Notebook**
Yet another timber bridge.
by Al Armitage

80 **Extra Narrow Gauge Junction**
Unit axle loads.
by Dick Andrews

PLANS

30 **Arizona Copper Company 0-4-0**
by Michael W. Conder

50-51 **Baldwin Plantation Locomotive**
by Ed Gebhardt

62-63 **Georgetown, Colorado Station**
by Harry Brunk

69 **Virginia & Truckee, Carson City Enginehouse Track Plan**
by Gary Caviglia

70-71 **Southern Pacific Narrow Gauge Combine #1009**
by Herman Darr

76 **Hammond & Little River Redwood Co. Bridge**
by Al Armitage

DEPARTMENTS

5 **Robert's Ramblings**

12 **New In Review**

16 **In Brief**

84 **Gazette Gallery**

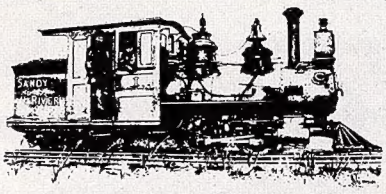
89 **Book Reviews**

96 **Riptrack**

COVER

This Jim Finnell painting, "Ophir Highline," is a fitting cover for our January issue. Rio Grande Southern #461 is dropping down out of the mountains after a battle with deep snow. This painting is now in the Bob Dezelin collection, but Jim is accepting commissions. Write to Chama Graphics at Box 856, Chama, NM 87520.

The **NARROW GAUGE AND SHORTLINE GAZETTE (ISSN 01 48-2122) is published in March, May, July, September, November, and January by Benchmark Publications, Ltd.,** P. O. Box 26, Los Altos, CA 94023. Subscription Rates: (United States) 2nd class mail - $18.00 per year. Foreign Rates (including Canada), Surface - $25.00 per year, (U.S. funds please). Second Class Postage paid at Los Altos, CA 94023 and at additional entry offices. Postmaster send address changes to **Benchmark Publications, Ltd.,** P. O. Box 26, Los Altos, CA 94023. The contents of this magazine must not be reprinted without permission of the publisher. **THE NARROW GAUGE AND SHORTLINE GAZETTE** incorporates **Finelines** and **The Slim Gauge News.** Printed in U.S.A. Copyright 1985 **Benchmark Publications, Ltd.** All rights reserved.



NARROW GAUGE AND SHORT LINE GAZETTE

Editor and Publisher
Robert W. Brown
Business and Office Manager
Irene L. Brown
Art Director
Sharon Olsen
Typography
John Bird
Associate Editors
Gene E. Deimling
Charles W. Getz
Copy Editor
Barbara Marsh
Contributors

Richard Andrews
Alan Armitage
Harry Brunk
Gary Caviglia
John Hitzeman
Marc Horovitz
Reg Shaffer

Subscription Rates:
United States
2nd class mail ..... $18.00 per year

Foreign Rates (including Canada)
Surface..... $25.00 per year

We cannot accept checks on overseas banks unless paid through a U.S. bank.

Authors:
Articles, photographs, and plans are welcome. When requested we will endeavor to return material in good condition. Payment upon publication. Author's instructions available upon request.

Advertising:
Advertising rates available upon request. Ad makeup service and typesetting available. **Benchmark Publications, Ltd.** reserves the right to refuse ads not keeping with the policies of the **GAZETTE**.

Dealers:
Dealers write for dealer terms directly to **Benchmark Publications,** P.O. Box 26, Los Altos, CA 94023, USA.

Returns: Send entire magazine please.

Send all correspondence to:
Benchmark Publications, Ltd.
One First Street, Suite N
P. O. Box 26
Los Altos, CA 94023

The Rio Grande Southern

Over 100 tapes sold in just one month! Yes, our first MODEL tape titled 'Modeling Your Favorite Railroad' sold over 100 copies the first month.

It doesn't matter what scale you are in, you're going to like this tape. Benchwork, track planning, wiring, scenery and backdrops *plus lots of great narrow gauge train action* make up this clear, well produced tape. Lots more too! A large ON3 layout and its construction is covered in this well received tape in STEREO SOUND! For only $39.95 (45 minutes), you gotta see it! Bob Brown says, 'I hope Green Frog does more of these tapes.'.... + $2.50 postage (1st class).

The Cumbres and Toltec

'Slim Rails Through the San Juans'--Our Cumbres and Toltec tape still continues to sell at a rapid pace. It must be the *complete* coverage of the C&TS as well as the great pacing shots, the terrific shots from the front of the loco, and the great STEREO SOUND that turns everyone on. At the recent 5th Annual Narrow Gauge Convention there was always a group watching our tape. Comments like "..*best tape I've seen*" were common! Rock steady shots, both tunnels, both main bridges (off the train and on)---ride right through Rock Tunnel on the front of the loco! Only $69.95 + $2.50 postage (1st class) and you get a $10.00 tax deduction; (we donate $10.00 to the C&TS each time you buy a tape). *You help support the C&TS!*

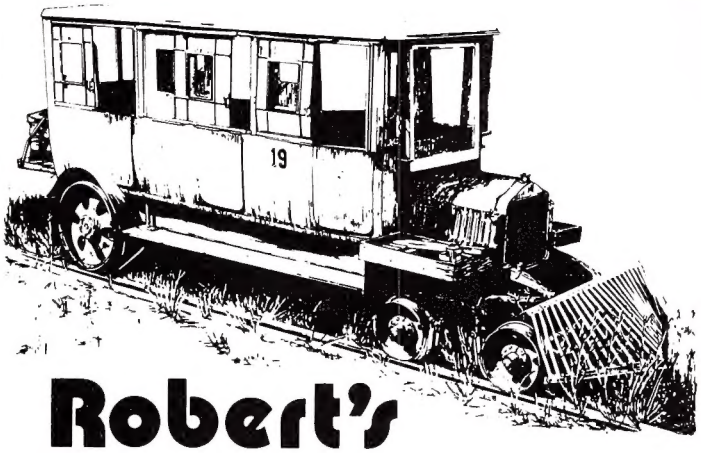
"Steam & Diesel Sounds of the 50's"

This AUDIO cassette sold out our first run in one month! Where can you find steam and diesel sounds of the 50's with this much fidelity and in stereo too? The Nickel Plate (Berkshires near 100 MPH); the Twentieth Century Limited; the Michigan Central. If you like the old stuff, this AUDIO tape is goin' to bring back some great memories!--only $8.95 (+.70 postage-1st class) for REAL TIME RECORDINGS, *NO high speed duplication* to reduce sound quality.

Green Frog Productions

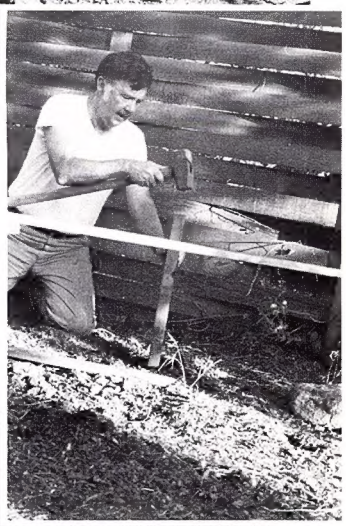
950 Bream Ct.
Marietta, GA 30067
(404) 971-6276

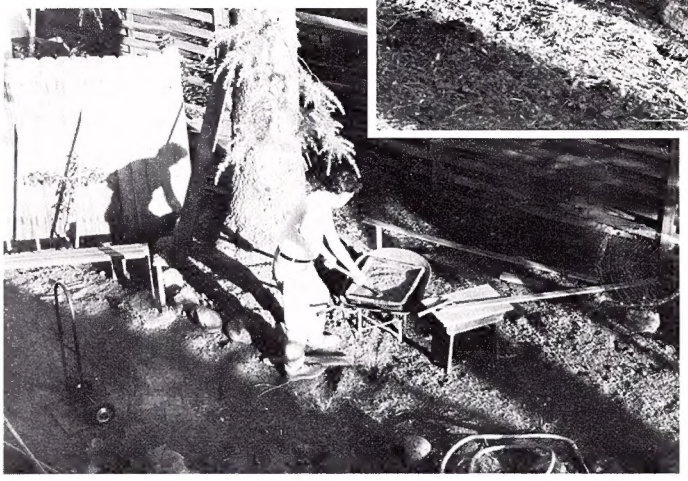
VISA MASTERCARD



Robert's Ramblings....

Photos by Irene Brown





Boy, I'm sure glad it's winter– no more back-breaking garden railway building for awhile. This year, winter offers me a respite from dirty fingernails, smashed thumbs and aching muscles. I'm back in my snug workshop working on my On3 Tuolumne Forks layout. Still, I do miss the balmy summer days in the garden watching squirrels scurry along my right-of-way and scaring away quail scratching for seeds under the track. By the end of summer I had a loop of track in operation and I also miss the little engines wending their way along the right-of-way at dusk with their headlights glowing. But most of all, I miss the sure-fire narrow gauge weight loss program occasioned by laying rails in the garden. Actually, I think I'm ready for summer again.

Bob Brown

Just as we were going to press I was notified that Don Brown had suffered a heart attack and died on December ninth. Don was well known to eastern narrow gaugers as a "kingpin" in the Mid-Atlantic Narrow Gauge Group. He hosted many of their meets and was recently honored by the group for his unflagging support. Don also ran the San Juan Engineering Company and produced some of the finest O scale narrow gauge kits ever made. In "real life" Don was an executive at AT&T. Don will be missed and we extend our sympathies to his wife and family.

Jan Rons Prints

Goose 3/Trout Lake 16" x 24"

Boreas Pass 16" x 24"

■ Full color, Limited edition (only 250 each) signed, numbered, cataloged
$45.00 each or $75.00 for set of 2

To order: specify quantity and titles/send check or money order payable to Ron's Art Graphics/Visa or MasterCard/send card no. and expiration date.

Rons Art Graphics
5436 E. Cambridge, Phoenix, AZ 85008

Model rail specialists since 1951 — one of the West's finest train departments with large selection of O, On3, HO, HOn3, N, and Z.

Complete stock of brass imports, rolling stock, kits and structures, detail parts & castings, books, tools, circus, etc.

THE ORIGINAL **Whistle Stop**

2 stores in California to serve you — both open 7 days

THE ORIGINAL WHISTLE STOP INC.
3745 E. Colorado Blvd. • Pasadena, Ca. 91107
(818) 796-7791

2828 Marconi Ave. • Sacramento, Ca. 95821
(916) 485-5288

HARRY'S DEPOT

O,On3, S, Sn3 • HO, HOn3-2, N
Narrow Gauge • Short Line Logging Equipment

NARROW GAUGE AND LOGGING LOCOS

PSC 20-TON SHAY	$265.00
UNITED BENSON T-BOILER	$350.00
PFM PACIFIC COAST SHAY, L/R	$400.00
PFM B-2 SHAY, L/R	$350.00
PFM CLASS C CLIMAX	$325.00
PFM B-2 SHAY, CUSTOM PTD.	$325.00
PSC C&S #75	$325.00
LAMBERT C&S #9 2-6-0	$200.00
PSC K-27 #461	$395.00
PSC K-27 #453	$395.00
WSM K-37, EXC. COND.	$275.00
NJ #361 C-21	$200.00
NJ #360 C-21, RE-MOTORED	$225.00

169 Rt. 112 • Patchogue, N.Y. 11772
Phone (516) 475-9056
Hours: W, Th 12-6 p.m. • T, Fri 12-8
Sat 10-5
VISA, MasterCard accepted.

Iron Horse Hobbies, inc.

22 N. ADDISON ST.
Box 118
BENSENVILLE, IL 60106
Phone 1-312-766-7630
(¼ block north of the Bensenville Milwaukee Road Station)
New Business Hours:
T, TH, F, 12-9 p.m. Sat – 10 a.m.-6 p.m.
Wed, Sun. – 12-6 p.m.
Closed Monday
95% MODEL RAILROAD STOCK
ALSO OVER 20 DESIGNS IN TRAIN T-SHIRTS
N SCALE BRASS IN STOCK OR RESERVE FOR *BEST PRICE!*
GRANDT LINE PARTS:
HOn3 – On3 – Sn3
SSAE FOR LISTING ON BRASS & PARTS

Depot G Hobbies

Large Scale Specialists

D&RGW 3'7" wb Freight Car trucks $16.00 pr.
- Mfg. by Grandt Line for Ryan Equipment Co.
- Styrene wheelsets in #1 or 1½" gauge
- DuPont Delrin sideframes and bolsters

Mack AC "Bulldog" chain-drive truck kit $12.95 each
- Mfg. by Monogram Models exclusively for Depot G
- Plastic 1:24 scale available in tank body or stake side

Send $2.00 for 20 page Detail Parts List.
½" scale and #1 gauge products at discount prices.

Box NG • OS371 Florida Lane • Winfield, Illinois 60190
(312) 260-9600

NARROW GAUGE PICTORIAL

Stock Cars, Refrigerator Cars, and Tank Cars of the D&RGW
VOLUME IV

NOW AVAILABLE
176 PAGES OF D&RGW FREIGHT EQUIPMENT
$20.00

VOLUME II
196 PAGES OF D&RGW PASSENGER EQUIPMENT
$20.00

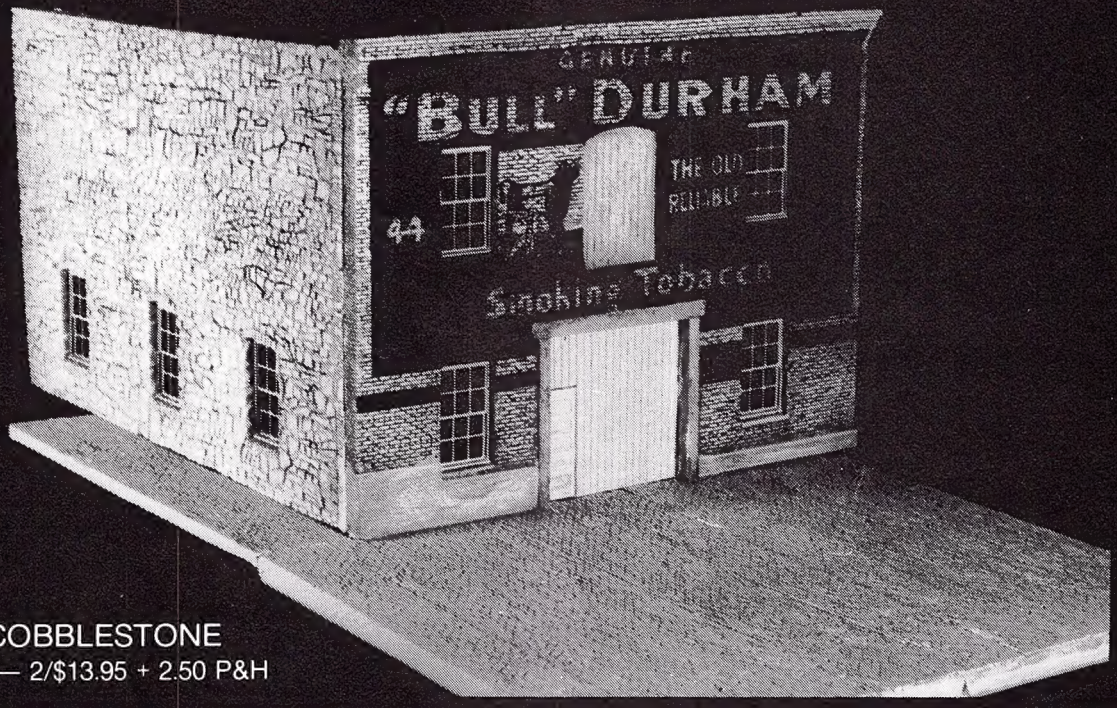
COMING SOON
VOLUME VI
C&S MOTIVE POWER

AT YOUR DEALER
OR DIRECT
CA RESIDENTS
ADD 6½% SALES TAX

R/ROBB LTD.
P.O. BOX 1891
OAKLAND, CA 94604

BLACKHAWK BLACKSMITH SHOP

O — $79.95 + 3.50 P&H
HO — $59.95 + 2.50 P&H

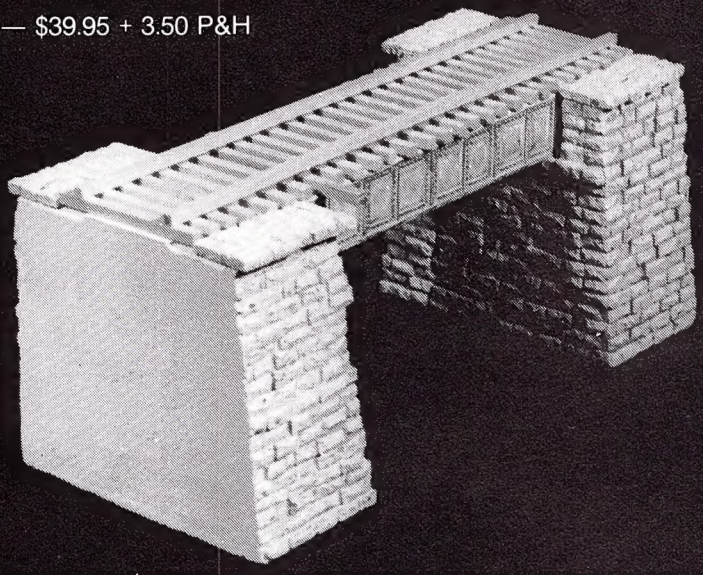


COBBLESTONE
ALL — 2/$13.95 + 2.50 P&H

TRAINS of TEXAS

D & RGW OTTO BRIDGE

O — $39.95 + 3.50 P&H



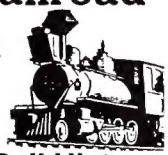
RUN-DOWN COKE OVEN

O — 2/$27.95 + 2.50 P&H
HO — 2/$13.95 + 2.50 P&H

VISA M/C 10606 SAGEWIND, HOUSTON, TX 77089

in Denver visit the

Colorado Railroad Museum



THE Center for Preserving Rocky Mountain Rail History

Our Museum, located at the foot of the Rockies just west of Denver, is home for over 60 historic engines and cars. Our Museum building displays an outstanding collection of artifacts taken from our huge archives and inventory. For over a quarter century the Colorado Railroad Museum has been THE Center for Preserving Rocky Mountain Rail History, and a *must* visit for railfans travelling through the West. Open almost every day all year — write for information.

RAILROAD BOOKS and Western History

SPECIALS

Colorado & Southern Narrow Gauge Car diagrams. Set of 63 sheets includes all passenger, freight and non-revenue as of the 1920s. Before many were scrapped such as steam wrecker, Jull plow, open cars. $25 the set.

Rio Grande Southern R.R. Packet of 30 pieces of paper, all kinds of forms, dates from early 1900s thru the Goose period. $10.50, plus $1.50 if by mail.

Colorado Railroad Museum

DEPT. S, BOX 10, GOLDEN COLO. 80402

DON'T BE CONFUSED

LAMBERT HAS SHINOHARA!

Lambert is your best source of supply for HO Code 100, HO Code 70, Dual Gauge, HOn3, N and HOn2½ trackage from Shinohara.

We are also distributing many other railroad products. Try us for NJ INTERNATIONAL, R.A. BOYD containers, DYNAMODELS kits and figures, PIKESTUFF kits and detail parts, HEKI trees and scenery items, KALMBACH books and video, FLEETLINE N scale metal figures, TOMIX N scale and lots more!

Send a self-addressed stamped envelope (#10) for a full product listing and news of our BIG FALL SALE including selected Shinohara items.

Please try your dealer first. If you have no dealer in your area or your dealer is unable to supply, contact us.

LAMBERT & Associates SHINOHARA TRACK

P.O. BOX 4338 San Leandro, CA 94579

CARSON AND COLORADO

Railroad Company

On3 PASSENGER CARS
1176 Seaward/San Luis Obispo, CA 93401

¼" SCALE NARROW GAUGE
PASSENGER CAR BODIES – $79.50 ea.
ALSO AVAILABLE IN KIT FORM – $32.50

DR-100 D&RGW Combine	DR-104 D&RGW Vestibule Coach
DR-101 D&RGW Coach	DR-105 Parlor-Buffet
DR-102 D&RGW Baggage	FRC-106 RGS-C&S-F&CC Coach
DR-103 D&RGW RPO	FRC-107 F&CC Combine

All bodies are assembled from basswood with roof ends rounded and fillits added. Large doors on the RPO. Combine and Baggage cars operate. Bodies are ready for hardware kits, trucks and miscellaneous details of the modeler's choice.

DEALER INQUIRIES WELCOME

HQ for BLW Photos!

"A BOON to rail historians, including Trains." So says David P. Morgan of the span (1860-1956), depth (15,000 photos), and service of H. L. Broadbelt's original collection of Baldwin Locomotive Works negatives.

170 page index! $10.00, (including two 8 x 10 prints of your choice). Prints: 4 x 7 / $1.00, 8 x 10 / $2.00. If the engine bore a Baldwin plate, we've almost certainly got it – from 0-4-0 saddletankers to Mallets. No wonder D.P.M. acclaims Broadbelt as the Baldwin photo reference. Please, no dealers.

Money back guarantee. Write:

H. L. BROADBELT
146 Princess Margaret Drive
Newport News, VA 23602

THE SANDY RIVER & RANGELEY LAKES
THE BRIDGTON & HARRISON

A 50 year trip in reverse in Al Hale's incredible time machine

24 Two Foot Gauge In Maine

1) **The Sandy River and Rangeley Lakes RR** Passenger and freight operations in Summer and the deep snows of Winter between Phillips, Kingfield, Strong and Farmington.

2) **The Monsen RR** shown running freight down to the Bangor and Aroostook.

3) **The Wisscasset, Waterville & Farmington** A ride by handcar along the banks of the Wisscasset River

4) **The Bridgton & Harrison** A ride in the goose on January 1, 1935. Then both freight (a rare occurence) and five car passenger trains between Bridgton and the junction.

5) **The Belfast & Moosehead Lake RR** A mid-Winter trip from Belfast to Burnham Jct. Not narrow gauge, but certainly a kindred spirit.

NES New England Short Lines

Steam operations on these memorable standard gauge short lines: The St. Johnsbury and Lake Champlain, The Montpelier & Wells River, The Champlain and Moriah, Claremont Steeple Cab electrics, Rock of Ages.

All this in one cassette - an incredible front row seat for star performances by some of history's most celebrated narrow gauge and short lines. Photographed by Albert G. Hale, 33 mins. black and white, sound $39.95 VHS or Beta

Why wait a year?

The Norfolk & Western Articulated 'A' runs every day at Sunday River, plus a host of the bigger 'Y' class to boot. 45 mins. color, sound 98 run pasts $49.95 VHS or Beta CAT. No: 1212

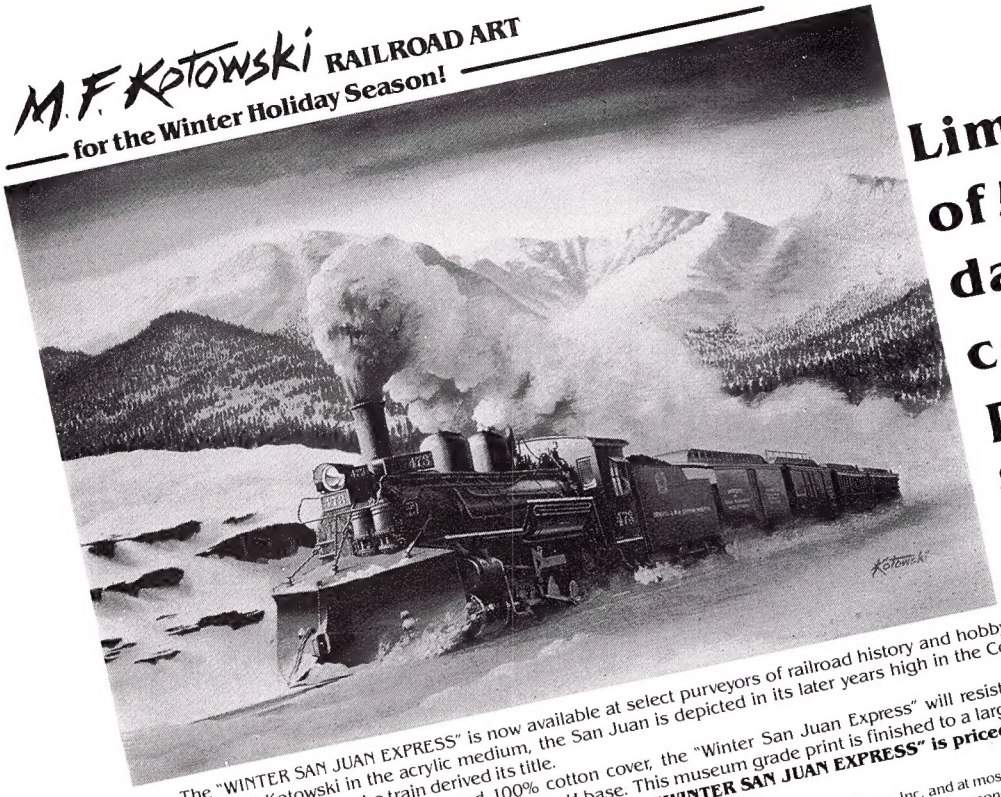
No one shot deals. Do you have 16M film of railroad subjects? For 15 years Sunday River has been helping photographers market their work in both film and video. More than a dozen receive annual royalties from us. The films belong to them. If this sounds interesting, give us a call or write.

CALL NOW TOLL FREE 24 HOURS A DAY
Credit Card and COD Orders.
800-824-7888 *Op. 545*

All items postpaid in U.S. Canadian surface add $1.95 per item. UPS $4.00 extra, Mass. Res. add 5% sales tax.

Sunday River Productions
P.O. Box 565, Concord, MA 01742

M.F. Kotowski RAILROAD ART
for the Winter Holiday Season!



Limited edition of 500, signed, dated and cataloged prints $45.00

All limited edition runs are shipped first class and insured.

The "WINTER SAN JUAN EXPRESS" is now available at select purveyors of railroad history and hobby. Illustrated by M.F. Kotowski in the acrylic medium, the San Juan is depicted in its later years high in the Colorado mountains from whence the train derived its title.

Printed on Buckeye Ltd. 90 pound 100% cotton cover, the "Winter San Juan Express" will resist fading, yellowing and brittleness because of its neutral pH base. This museum grade print is finished to a large poster format of 26X32 inches. Image area is 18X26 inches. **The "WINTER SAN JUAN EXPRESS" is priced moderately at $19.95.***

M.F. KOTOWSKI Railroad Art is available through Wm. K. Walthers, Inc. and at most discriminating hobby shops. To order direct send $19.95 or $45.00 (for Limited/Select run), check or money order (U.S. orders only), or International Postal Money Order (U.S. funds).

*First class postage in U.S. and Canada add $2.00. Foreign orders add $4.00 for postage. No stamps or coupons please. California residents please add 6% sales tax.

M.F. KOTOWSKI RAILROAD ART
21 North Harrison Ave., suite 200
Campbell, Calif. 95008
408 • 379-0180

Peninsula Hobbies
"SPECIALIZING IN CONSIGNMENT"

(These kits are all on consignment and selling prices have been determined by owner.)

Fine Scale Miniatures

HO - #25, Branchline Water Tower	$60.00
HO - #135, 2 Stall Engine House	100.00
HO - #150, Freight House	105.00
HO - #155, Coal Dock	65.00
HOn3 - #175, Rail Car Shed	75.00
HO - #180, Sand House	90.00
HO - #185, Feed Mill	90.00
HO - #235, Station	48.00
HO - #230, Branchline Bucket Coal. Station	39.00
HO - #240, Water Tank	35.00

Grandt Line (Sale)

	Regular Price	Sale Price
On3 - Porter 0-4-0	$55.00	$44.00
On3 - "Grab Box" Window Asst.	14.95	11.96
On3 - D&RGW Drop Bottom Gondola (800 Series)	42.00	33.60
On3 - C&S/RGS Stock Car	42.00	33.60
On3 - D&RGW Drop Bottom Gondola (700 Series)	42.00	33.60
On3 - RGS #6 Work Goose	190.00	152.00
HOn3 - D&RGW Wheel & Tie Car	17.95	14.36
HOn3 - Rio Grande 30' Flat	14.50	11.60

Carson & Colorado RR Co. (Sale)

On3 - #102-D&RGW Baggage	$31.50	$22.05
On3 - #103-D&RGW RPO	31.50	22.05
On3 - #104-D&RGW Closed Vestibule	31.50	22.05
On3 - #105-D&RGW Alamosa	31.50	22.05
On3 - #106-D&RGW Coach	31.50	22.05
On3 - #107-D&RGW Combine	31.50	22.05

V&T Shops (Sale)

On3 - Franktown Water Tank	$14.95	$11.96
On3 - D&RGW Baggage	39.95	31.96
On3 - D&RGW Coach Closed Vestibule	55.00	44.00
On3 - Repair Shed	35.00	28.00

Simpson (Sale)

	Regular Price	Sale Price
On3 - West Side Boxcar #3	$36.95	$25.87
On3 - RGS Work Box 1789	45.00	31.50
On3 - D&RG/RGS 27' Boxcar	30.00	21.00
On3 - Westside Long Gon 15	22.00	15.40
On3 - Westside "Short" Wooden Water Car	40.00	28.00
On3 - Westside Sand & Gravel Car 276	22.00	15.40
On3 - Mich-Cal 2-22' Skeletons	45.00	31.50
On3 - D&RG Cumbres St. Coal Shed	21.00	14.70
On3 - Westside Equip. Flat Car	28.00	19.60
On3 - Westside 24' Flat Car	27.00	18.90
On3 - Westside Logging Flat Car	32.00	22.40
On3 - Westside Logging Flat #8	32.00	22.40
On3 - Westside Carter Bros. 24' Flat	27.00	18.90
On3 - Westside Short Caboose #3	36.95	25.87
On3 - Hobart Estate Side Door Caboose #3	33.00	23.10
On3 - West Side Long Caboose #1	40.00	28.00
On3 - West Side Short Caboose #4	36.95	25.87
On3 - D&RG Short Caboose 0575	50.00	35.00
On3 - RGS Long Caboose 0404	50.00	35.00
On3 - RGS Long Caboose 0404 (July '80)	35.00	24.50
HOn3 - Westside Logging Flat #8	9.50	6.65
HOn3 - Westside Sand & Gravel Car #276	12.00	8.40
HOn3 - Westside Logging Flat Cars (2)	17.00	11.90
HOn3 - Westside Equip. Flats (2)	17.00	11.90
HOn3 - Westside 24' Flat Cars (2)	15.00	10.50

Model Die Casting (Sale)

HO - 2-Truck Shay	$45.00	$31.50
HO - 3-Truck Shay	59.00	41.30
HO - V&T 2-8-0 Locomotive Kit	49.98	34.99
HO - Santa Fe 4-4-2 Atlantic Kit	49.98	34.99
HO - So. Pac. 2-8-0 Consolidation Kit	49.98	34.99

Model Masterpieces (Sale)

	Regular Price	Sale Price
On3 - C&S Flat Car	$27.50	$22.00
On3 - Gunnison Depot	49.50	34.65
O - Highlands Station	45.00	31.50
HO - Horizontal Boiler	13.50	10.80
HO - Air Operated Hoist	13.50	10.80
HO - Concrete Pier Bridge	11.95	9.56
HO - 120 Ton Overhead Crane	29.50	23.60
HO - Leadville Powerhouse	29.95	23.96
HO - Chessman Drug Co.	27.50	22.00
HO - The Brazelton Bldg.	39.50	31.60

Whistle Stop Kit Co. (Sale)

On3 - D&RGW Pass. Coach - closed vest.	$59.95	$47.96
On3 - D&RGW Baggage Car	54.95	38.47

Suydam (Sale)

HO #1, Furniture Factory	$10.95	$7.50
HO #4, Buckhorn Mine Ore Plant	13.95	10.95
HO #7, Warehouse	10.95	7.50
HO #19, Pacific Foundry	8.75	6.50
HO #24, Wyoming Coal Mine	17.50	12.75
HO #25, Northside Tool & Die Co.	7.95	6.95
HO #61, Interlock. Tower & Shed	5.95	4.25
HO #64, Station Shed - comp. roof	7.95	7.25
HO #71, Hobby Shop	9.75	6.25
HO #72, Follies Theatre w/lites	12.95	9.95
HO #74, Electronics Plant	9.25	6.25
HO #75 - Triangle Cafe/Int./Lites	15.25	9.95
HO #76 - Ed's Market/Int./Lites	11.95	10.95
HO #81 - Grand Jct. Box Factory	7.95	6.50
HO #82 - Purina Chows Feed Mill	11.95	10.95
HO #83 - Sunkist Citrus Exchange	8.75	5.25
HO #87 - Mail Pouch Tobac. Barn	3.95	2.75
HO #401 - Coach or Roomette Int.	3.75	3.25
HO #402 - Diner Interior	3.75	3.25
HO #403 - Pullman Room Car Int.	3.75	3.25
HO #404 - Observ. - Lounge Int.	3.75	3.25
HO #411 - Old time & N.G. Cars Int.	3.75	3.25
HO #413 - Std. Pullman Int.	3.75	3.25
HO #414 - Pullman - Obs. Int.	3.75	3.25
HO #415 - St. Cafe - Obs. Int.	3.75	3.25
HO #421 - St. Cafe Int.	3.75	2.25

Store Hours

M-F	11:00 – 6:00
Sat	10:00 – 5:00
Sun	12:00 – 4:00

1448 Cary Ave., San Mateo, California 94401 ☐ 415/343-7779
(Located in the Shoreview Shopping Center at 3rd Ave. and So. Norfolk)

MasterCharge and VISA cards accepted.

California Residents add 6½% sales tax.
Please add 5% shipping on orders over $30.00.
Please add $1.50 shipping on orders under $30.00.
All items subject to availability; prices subject to change.

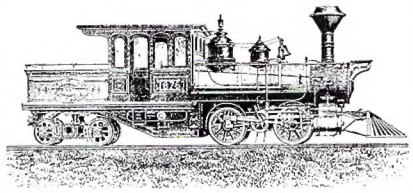
Roy's Train World

Arizona's largest selection of model railroading supplies. We are exclusively trains.

Open M. T. W. F. 9 – 5:30,
Th. 9 – 9, Sat. 9 – 5
MC/VISA accepted

1033 S. Country Club Dr.
Mesa, AZ 85202
Phone: (602) 833-4353

MASON - BOGIE



Engineering information and technical details on the most advanced steam locomotives of the 1870's, reconstructed and delineated to gratify the most discriminating.

WALLACE ENTERPRISES
14110 E. Progress Way, Aurora, Colorado 80015

WORLD-WIDE R.P.O. SERVICES NARROW GAUGE

We carry
HOn3 • Sn3 • On3

Nice to have seen you at the 5th National Narrow Gauge Convention

STRETE HOBBIES
3655 Sullivant Ave.
Columbus, Ohio 43228

SANDY RIVER & RANGELEY LAKES R.R.
GENUINE RAILROAD SPIKE
Mounted on 5" x 7" Solid Walnut Plaque,
$12.95 each postpaid
ALSO
S.R.R.L. SOLID BRASS BELT BUCKLE,
$9.50 each postpaid
CUSTOM BUCKLES MADE TO ORDER
CURIOSITY CUSTOM ENGRAVING
P.O. Box 437, RANGELEY, ME 04970

NS-89 NONILLUMINATED SWITCHSTAND

Prefinished and ready for assembly on layout

each $4.95

UTAH PACIFIC
MODEL RAILROAD PRODUCTS
P.O. BOX 8174 · SALT LAKE CITY, UTAH 84108

Narrow Gauge

	BOOKS	
	C & S Narrow Gauge - Ferrell	27.96
	N.G. Pictorial Vol II: Passenger cars	16.00
	N.G. Pictorial Vol IV: Freight cars	14.80
	LA BELLE WOODWORKING	
20	D&RG Coach	10.20
35	D&RGW Stock car	6.00
37	D&RGW short caboose	7.60
	GRANT LINE	
5187	D&RGW Wheel & tie car	15.00
5188	D&RGW Drop Bottom gon	21.56

LSASE for current list
Orders under $50.00 Add $2.00

Model Railway Supply Co.
5103 S. 338 Auburn, WA 98001
VISA (206) 939-7011 MASTER CARD

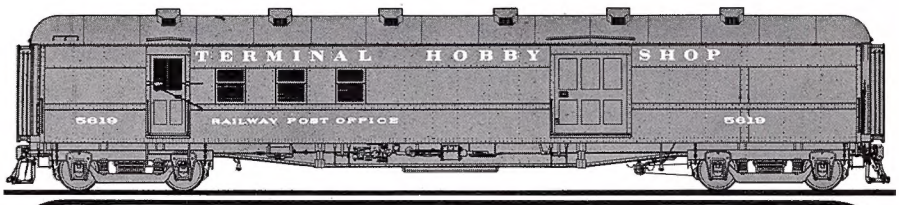
Sn3 Modeler

Sn3 Modeler **is an exciting new magazine devoted to S scale narrow gauge model railroading. Superbly printed on glossy paper, *Sn3 Modeler* contains color photography, great feature articles by veteran modelers, car and locomotive plans, Sn3 layouts and models, prototype information, informative columns and ads from the major Sn3 suppliers.**

Sn3 Modeler **is published semi-annually, Spring/Summer and Fall/Winter. Available direct for $9.00 a year; $15.00 outside USA. Sample issue, $4.50.**

Sn3 Modeler
310 Lathrop Ave.
River Forest, IL 60305

Dealer inquiries invited



Go First Class with Terminal Hobby Shop

T.H.S. SINCE 1954 R.P.O.

When you mail order for your layout, think Terminal Hobby Shop! Since 1954, Terminal Hobby Shop has provided "First Class" service to thousands of satisfied model railroaders. Terminal Hobby Shop stocks an incredible variety of HO, N and O Scale products and supplies. Best yet, if there's no hobby store near you, it's as close as your mailbox or telephone!

Not even "gloom of night" slows down mail order service at Terminal Hobby Shop! After regular hours, phone orders are recorded for processing the next business day.

You get exactly what you want when you order from Terminal Hobby Shop. Terminal Hobby Shop stands behind every product 100% by offering an exchange, credit or refund to insure your satisfaction.

Let Terminal Hobby Shop show you "First Class" mail order service in action! For a free order blank and more information, send a #10 Stamped, Self Addressed Envelope to the address below, or call (414) 461-1050.

Terminal Hobby Shop
5619 W. Florist Ave. Milwaukee, WI 53218

© 1984 Terminal Hobby Shop

In St. Louis

VISIT

Tinker Town

9666 CLAYTON ROAD

(314) 991-4311

NARROW GAUGE

BRASS
STRUCTURES
ROLLINGSTOCK
Track items
RAILROAD BOOKS

PUFFING BILLY MODELS

New HOn3/HOn2½

Bellevue & Cascade Flat car kit. Castmetal underframe and details with timber deck. Includes coupler adaptor plates and replacement axles for Grandt Line HOn3 trucks. $7.95 less t/c.

Coming soon B&C Stock car kit in white metal, wood and injected styrene. HOn3/HOn2½ $13.95 less t/c.

Dealer enquiries invited.

PUFFING BILLY MODELS

Proudly made in Australia

S SCALE FORD DUMP TRUCK

'34 FORD DUMP TRUCK

This is a white metal and plastic kit. The dump bed is injected plastic. The windows and headlight lenses are injected clear plastic.

CMS-113

$16.95

LOCO CLEANUP KIT

White metal detail kit. Includes shovel, broom, water bag, and rake.

CMS-112

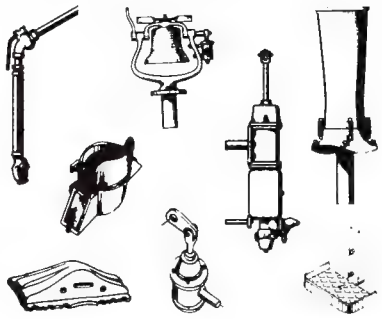
$2.95

CHAMA

MODEL SHOP & GALLERY 505-756-2237
P.O. BOX 856, CHAMA, NM 87520

WE ACCEPT MASTER CARD & VISA

PLEASE ADD $2.50 SHIPPING



For your kit-bashing and/or scratch-building in S and Sn3, look over Tomalco's line of precision car & loco castings and pipe fittings. Every last detail of the prototype parts are duplicated to scale in brass for your modeling pleasure. Send SSAE for catalog (2 stamps, please).

Box 158 • McCracken, Kansas 67556

Rick's Grande

narrow gauge car shop

Narrow Gauge Brass

On3 Cars – Ready to Run
All Cars, Kits and RTR come with Trucks and Couplers.
Deduct an additional 10% on Kits orders of three (3) Kits or more.

	Kit	R.T.R.	No. of RTR Available
Grandt Line			
0-4-0 Porter	$50.	$200.	
C&S/RGS Stock	$38.	$100.	2
D&RGW Drop Bottom Gon	$34.	$100.	
C&S 4 Wheel Caboose	$34.	$100	1
UTLX Frameless Tank Car	$42.	$100.	5
Star Models			
D&RGW Open End Coach	$50. w/Inter.	$130.	
D&RGW Closed Vestibule Coach	$50. w/Inter.	$130.	
D&RGW Baggage	$50.	$110.	
D&RGW R.P.O.	$50.	$120.	
D&RGW Alamosa Parlor Car	$50.	$110.	
D&RGW Combine	$50. w/Inter.	$125.	
D&RGW 3000 Series Box Car	$42.	$100.	3
Timber Creek			
D&RGW 30' Refrigerator Car	$33.	$100.	
D&RGW 30' Box Car	$40.	$105.	
D&RGW 30' Stock Car	$40.	$105.	1
D&RGW Pipe Gon	$31.	$ 90.	
D&RGW Idler Flat	$28.	$ 80.	
D&RGW High Side Gon	$31.	$100.	
Quality Craft Models			
E.B.T. 3-Bay Hopper 2 per box	$45.	$95. ea Car	6
Our Own R.T.R. Scratch Built Cars			
D&RGW 6300 Series Flat		$75.	1
D&RGW 6000 Series Flat		$70.	

Your choice of Road Number and Lettering Style on R.T.R. cars.
$2.00 postage and handling. N.Y.S. residents – Please add appropriate sales tax.
Call or write on availability of RTR cars.

P. O. Box 17333 • Rochester, N. Y. 14617 • Phone: (716) 359-1048

CHEAT RIVER COAL & LUMBER COMPANY

WE MAKE YOUR LOCOMOTIVES RUN AS WELL AS YOU MAKE THEM LOOK
precision mechanism work including motors, gears and complete drive trains
locomotive chassis modified & rebuilt
custom designed and built drives available
shays and geared engines our specialty

THE FINEST CARRIER CONTROL AVAILABLE
→ P.S.I. DYNATROL ←
CALL OR WRITE FOR OUR PRICE LIST

NEW BRASS AT 10-15% OVER COST!!

P.O. BOX 289/23 RICHWOOD PL.
DENVILLE, N.J. 07834/201-627-5460

CHARING CROSS

Seriously Modeling Colorado?

The next best thing to being *here* is drawing upon the resources of books on Colorado mining, architecture, scenery, history, ghost towns, mining camps, historic photographs — and lest we forget — railroads.

Selections by and for modelers, sticklers for accurate prototypic inspiration and lovers of Colorado's past.

Your name and address brings our free ***Modeler's Book List*** via first class mail. Foreign requests answered by air mail.

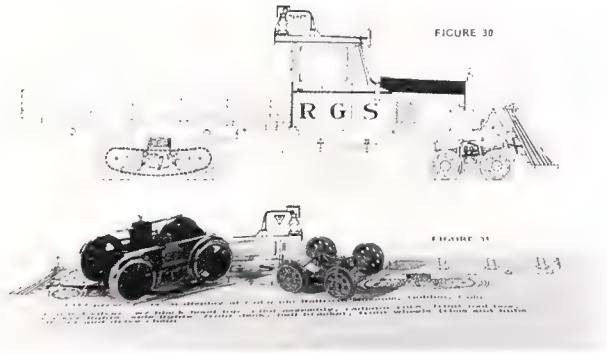
CHARING CROSS STATION
Main Street • Silver Plume, CO 80476
(303) 569-2108

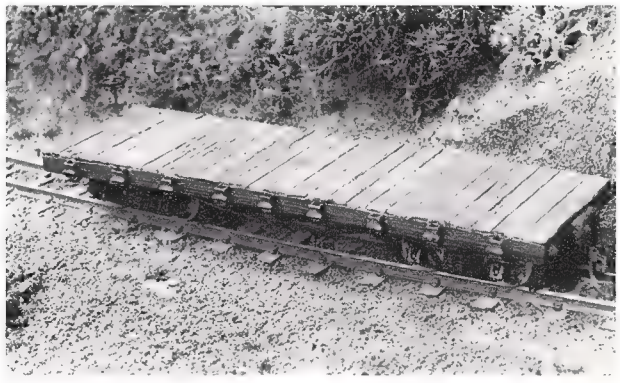
NEW in REVIEW

Grandt Line, 1040 B, Shary Ct., Concord, CA 94518 has issued their new On3 RGS Goose #6 and it is *beautiful.* I received my kit right on the deadline day for this January issue so I will only describe the kit and include a photo of the new drive truck in this issue. There will be a complete construction review in the March issue.

This kit includes the excellent black plastic injection castings we have come to expect from Grandt Line. Number 6 is designed so that the motor will be completely hidden under the seat in the cab leaving the rear deck clear. The motor drives via a shaft to the rear truck just like the prototype. There is a dummy motor under the hood and the cab is completely detailed.

The kit comes with five pages of step-by-step instructions, three pages of plans, showing all the possible prototype variations, and a page of silhouette drawings showing where the parts are located on the sprues. There is also a list of parts and directions for adding working lights. There is even a template to help you cut out the window material. A history of Goose #6 is included along with references for further reading. The kit comes complete for $190.00. I know my goose will find its way onto the rails of Tuolumne Forks. *Bob Brown.*

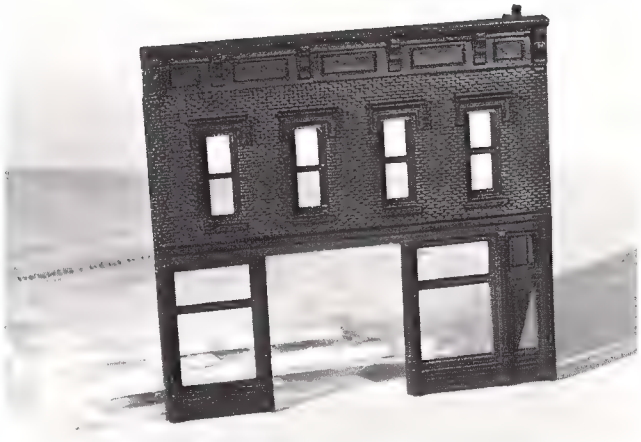




Puffing Billy Models, 11 Dunoon St., Mooroolbark, Vic. 3138, Australia has several new items for sale. PB is bringing out a series of HOn30/HOn3 freight car kits based on the Bellevue & Cascade plans by Albin Lee published in the July/August, September/October and November/December 1979 **GAZETTE**s (out of print). The first kit is for a flatcar. The kit consists of a one-piece white metal main frame onto which you attach the brake cylinder, truss rod pedestals, nylon truss rods, brake wheel and staff, special cast Kadee coupler pockets, and the deck (made up of individual boards). The car is nice and heavy and should run well.It sells for $7.95 less trucks and couplers.

PB also has a kit for a 24-foot flatcar underframe. One version comes with cast-on stake pockets and the other comes without the stake pockets. These kits sell for $6.95 each, less trucks and couplers. All of these kits come with special plastic axles which will allow you to convert the excellent HOn3 Grandt Line trucks into free-rolling HOn30 trucks. You can also buy these axles separately – enough to convert three pairs of trucks for $2.95. PB has plans to do several more cars so let's wish them well. *Bob Brown.*

Design Preservation Models, P.O. Box 30, Jackson, WI 53037 has two new HO scale buildings ready. These kits have very high quality castings but are low cost (only $4.95 each) and are very easily assembled. One of these kits makes into Robert's Dry Goods store, and the other into Kelly's Saloon. The walls are polyester castings and the roofs are sheet styrene. Window material is provided. The simple instruction sheet included aids in assembly. *Bob Brown.*

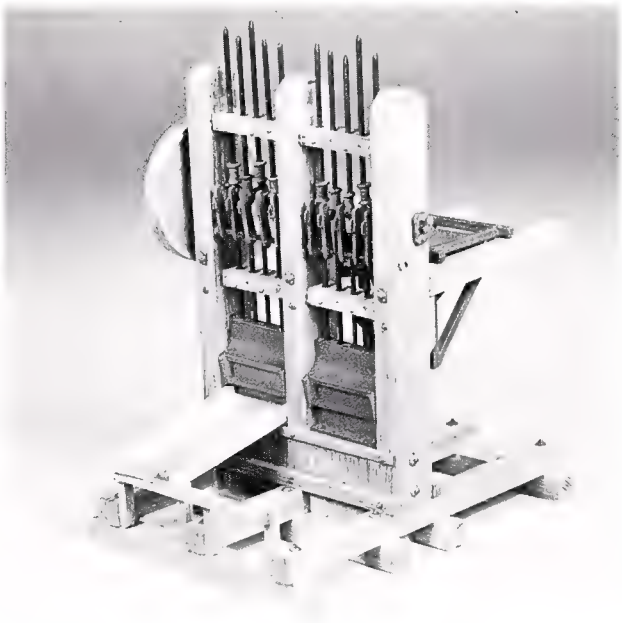


J&M Distributors, 1760 Monrovia A-15, Costa Mesa, CA 92627 is continuing to bring out improved and updated versions of the old HO scale line of Muir Models. The second in this series of kits is for a sand house on the Santa Fe called the Sacramento Sand House. There are actually two prototypes for this kit, the Santa Fe sand house in Sacramento, California, and another nearly identical one in San Bernardino. The kit is made up of Kappler wood, Grandt Line plastic details, Sequoia white metal details, new instructions and plans, and new box art. There is also a painting and weathering sheet. The kit comes in HO for $21.95 and in N scale for $18.95. *Bob Brown.*

American Model Builders, Inc., 1408 Hanley Industrial Ct., St. Louis, MO 63144 has their new HO ten-stamp ready. This model is designed to fit into the stamp mill being described by John Hitzeman in his series, "Ore Processing," The prototype of this ten-stamp machine was described in Part 8 in the July 1985 **GAZETTE**. The construction of the model is described in Part 11 in this issue.

This kit is the second in a series designed to enable the modeler to build all of the machines in a typical stamp mill. The first kit was for a jaw crusher, the third will be for ore feeders and the fourth for a Wilfley table.

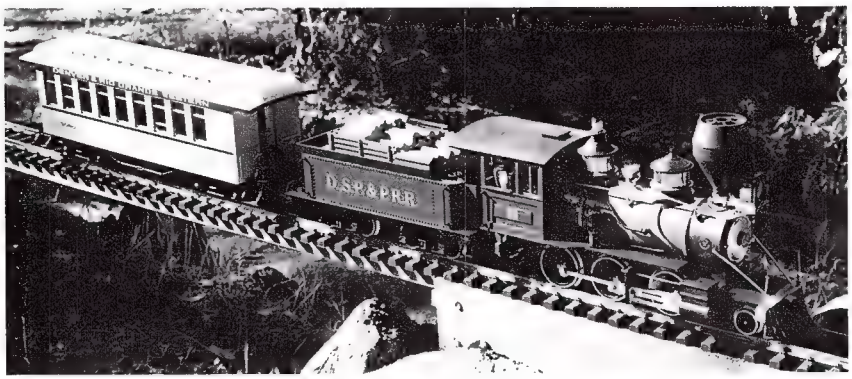
The HO ten-stamp sells for $34.95 and includes some 50 white metal castings, Kappler wood, and Grandt Line parts. A complete two-page instruction sheet includes information on assembling the belt wheels, cams, and stamp rods – all of which actually work. *Bob Brown.*



LGB (Ernest Paul Lehman Patentwerk, available from your LGB dealer) has produced a magnificent new Mogul. The prototype for this Mogul was one of eight of this design built for the Denver South Park & Pacific by Cooke in 1884. (If you're interested in the details, the December 1985 MODEL RAILROADER has a discussion of the numbering of the prototype locomotives in this series.) It's a really attractive prototype and I'm glad LGB chose it for their first model based on American practice. Let's hope LGB continues to bring out U.S. prototype models.

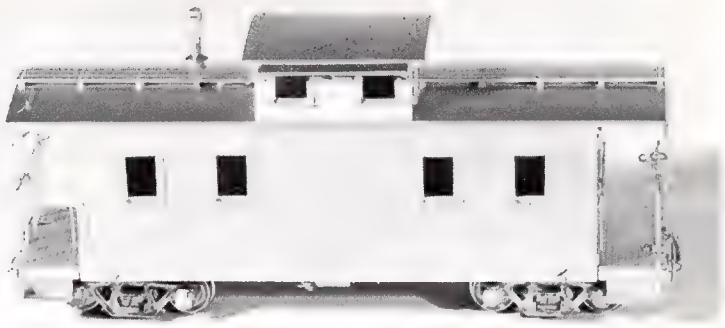
The LGB DSP&P Mogul is colorful, faithful to the prototype, and runs well. The cab and tender are green, while the boiler and pilot are bright red, and the smokebox, smoke stack, cylinders, and tender frame are black. Extra pressure-sensitive labels with letters and numbers are provided so you can change your model's number or label it for the Denver & Rio Grande instead of the DSP&P. There is a brass bell, and the handrails are brass-plated flexible plastic so they won't bend or kink. Working lights and a smoke generator in the stack compliment the full cab interior and fireman loading wood.

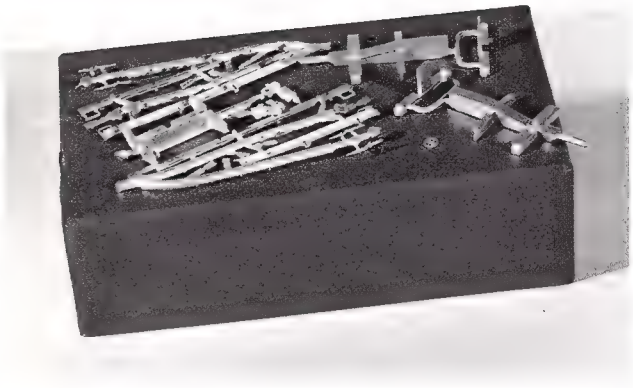
This model is big: 25 inches long, from pilot to tender, and weighs almost eight pounds. An all-new mechanism was specially designed for the Mogul. Access to the motor and gears is by removing the bottom frame plate; the sides of the frame form a box for the mechanism. All drivers, as well as the tender wheels, have electrical pickup via spring-loaded brushes. I ran my Mogul around my garden railway several times and found it very smooth and quiet. A neat little switch on the back head allows you to turn lights and smoke off so the engine can sit idle on a siding.



The engine comes packed in a gigantic styrofoam box with a helpful instruction book. See your LGB dealer for price. *Bob Brown.*

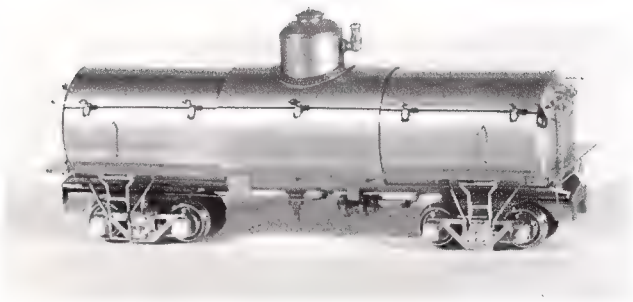
Peach Creek Shop, 2405 Blue Valley Dr., Silver Spring, MD 20904 has a new HOn3 all-brass, Korean-import available: an East Broad Top brass caboose. The model is for EBT #27 or 28 and sells for $73.50. The workmanship is clean and the car comes with the distinctive EBT cast trucks. *Bob Brown.*





David Hoffman, 1619 North Eden Circle, Titusville, FL 32796 has a new all-brass HOn3 East Broad Top steel flatcar kit for sale. The kit comes as a set of brass parts still on their casting sprues. The parts have to be cut off the sprues, cleaned up, and soldered together. The flatcar sells for $35.00 less trucks and couplers. Hoffman also has HOn3 kits for the EBT miners coach "Brownie" for $65.00 less trucks and couplers, and for the little EBT scale car for $35.00. He also has several other EBT parts for sale. *Bob Brown.*

Ryan Equipment Co., Railway Products Division, 2674-76 Coyle Ave., Elk Grove Village, IL 60007 has some new trucks available in either LGB (G) gauge or ½N3 gauge. These D&RGW short wheelbase trucks were made by Grandt Line and come assembled and ready to run with the exception of the journal box lids which must be snapped into place. Trucks of either gauge sell for $16.50 a pair. *Bob Brown.*

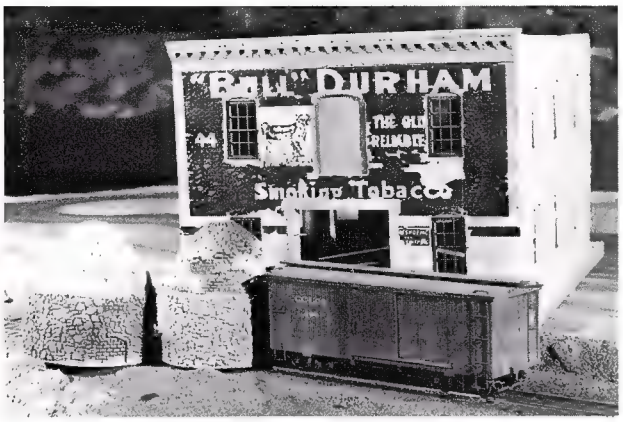


Formas Models, 4-41-7 Kamata, Ohta-Ku, Tokyo, Japan 144 has a new HOn3 brass GRAMPS tank car. This model is well assembled, well detailed, and captures the appearance of the prototype car. The model comes complete with trucks for $82.29, postage included. *Bob Brown.*

Trains of Texas, 10606 Sagewind, Houston, TX 77089 has several new kits ready and several more on the way. Coming soon is the Gilpin Hotel and some 5 x 8 inch sheets of cobblestone pavement. Now available is a kit for the famous Black Hawk, Colorado, "Bull Durham building." (This brick and stone building is actually the Black Hawk machine shop and was described by Harry Brunk in Part 8 of his series, "Up Clear Creek," in the March/April 1981 **GAZETTE**.) The model is available in both HO and O scale and both kits contain hydrocal castings, stripwood, and a beautiful Bull Durham press-down sign by Vintage Reproductions for the front of the building. My O scale kit went together easily and looks wonderful on Tuolumne Forks. The O scale kit sells for $79.95; the HO kit is $59.95.

Trains of Texas also has a set of two dilapidated beehive coke ovens ready. These ovens will go well with the other Trains of Texas set of coke ovens reviewed in the September/October 1985 **GAZETTE**. Now you can expand your coke production industry. These new ovens sell for $27.95 a pair in O scale and $13.95 in HO.

A third new kit from Trains of Texas is for an On3 Carter Brothers 28-foot boxcar. This little kit is made up of pre-cut strip wood, scribed wood, and Grandt Line details. It comes less trucks and couplers for $19.95. *Bob Brown.*



Grandt Line, 1040-B Shary Ct., Concord, CA 94518 has a new kit for a D&RGW 800 series drop-bottom gondola ready. The 800 series gondolas differed from the 700 series gondolas mainly in their corner strap construction. The new kit consists of over 220 styrene, Delrin, and polypropylene parts, brass wire, Grandt trucks, a brass brake wheel, six pages of instructions, two pages of photos, two pages of parts identification silhouettes and four pages of drawings. Grandt line couplers are included as are the parts to convert the car to Kadee On3 couplers. The instructions provide tips for painting and weathering styrene as described in the July/August 1982 **GAZETTE**.

When I got this kit for review, I already had several Grandt line 700 series gondolas. However, the 800 series gondolas kit turned out to be so different from the 700 in appearance that I decided to add several of these fine 800 series cars to my layout. The detail and fine quality of these Grandt Line kits makes them a joy to assemble. If you want an 800 series gondola, it is certainly easier to assemble one of these new kits than to rebuild (as did a friend of mine) a 700 series kit. *Dave Adams.*

American Model Builders, Inc., 1408 Hanley Industrial Ct., St. Louis, MO 63144 has a new kit for a basic log car. This kit will build into an On3, On30, or On2 model. The kit includes pre-cut wood, Grandt Line plastic details and AMB white metal castings. You can build the car with or without air brakes. The kit comes less trucks and couplers for $12.95. *Bob Brown.*

In Brief...

If you are in Sn3 and even if you are not, don't miss the Sn3 Dispatch put out by **PBL**, Box 749, Chama, NM 87520. This newsletter lists what's new at PBL and has lists of Sn3, HOn3, and On3 models for sale. Send $5.00 for this quarterly publication...

The 1986 O scale Convention will be held at the Marriott Hotel in Burlingame, California, June 10 – 15. This convention is being sponsored by the Bay Area O Gaugers and co-chaired by by Bob Dupont. Bob chaired the national NMRA convention in San Mateo a few years ago and really knows how to put on a good convention. The group will feature On3 as well as O scale. In fact **GAZETTE** editor Bob Brown's On3 Tuolumne Forks will make its debut on the layout tours during this convention. Write to 600 Maple St., San Mateo, CA 94402 for details...

American Model Builders, Inc., 1408 Hanley Industrial Ct., St. Louis, MO 63144 has a new little HO scale Missouri Pacific coal shed kit ready. It consists of seven metal castings and sells for $3.25...

New England Hobby Supply, Inc., 71 Hilliard St., Manchester, CT 06040 has several G scale building kits ready. There is a station for $39.28, a passenger platform for $19.98, and a general store for $29.98. These kits are made from die-cut plywood with wooden window trim...

Models by Roger Schenck, at 7103 Monlaco Rd., Long Beach, CA 90808, has several new Sn3 trucks available. Now ready is an N-C-O five-foot, flat-bottomed freight and tender truck, a four-foot Carter Bros. freight truck with 24-inch wheels, and an SPNG Thielsen 54-inch arch bar. All of these trucks are white metal castings with Grandt Line wheels and sell for $9.95 a pair...

Lambert, P. O. Box 4338, San Leandro, CA 94579 has several new flush-cutting pliers. Various models are designed for cutting either wire or rail. With a pair of these cutters you can avoid unsightly crooked cuts on your rail by snipping it off absolutely square. These flush cutters sell for $17.95 each...

CS Models, F 110-99, 232 H St., Blaine, WA 98230 has a new N gauge 62-foot wood-chip car kit for $5.95 in the U.S. and $6.95 in Canada. This kit is composed of black plastic injection moldings and builds into a modern hopper car of the type used to move wood chips...

Mother Lode Models, available from Pro-Custom Hobbies, 742 Frederick Rd, R.D. #2, Catonsville, Md 21228 is marketing a great little fishing boat model in HO scale. The kit is composed of a polyurethane hull and cabin with a styrene roof and wooden mast. **GAZETTE** editor Bob Brown is using the kit without the cabin to build a small boat for his On3 Tuolumne Forks. This boat could also be used in S scale and sells for $9.95 plus $2.71 postage and handling...

Simpson, P. O. Box 256, Smith Flat, CA 95727 has been busy. He has five sizes of ½-inch scale windows for the Jefferson, Colorado Depot. These sell for $2.50 a pair. He also has ½-inch scale D&RGW 3000 series truss rod pedestals, at 16 for $2.50, turnbuckles at eight for $4.00, and some six-inch nut/bolt/washers at 16 for $2.50. For HOn3 modelers Simpson has two sizes of West Side Engine House windows, four for $1.25. Simpson has also reprinted a West Side 1938 to 1952 Train Operation Book of Rules. He has photocopied the original, pocket-sized mimeographed book. It sells for $5.00...

Depot G Hobbies, O S 371 Florida Ln., Winfield, IL 60190 is doing a re-run of some of the long-out-of-production Monogram ½-inch scale Bulldog Mack truck kits. There were four trucks in this series, a dump truck, a log truck, a side-stake truck, and a tank-body truck. Depot G is bringing out only the last two of these in this limited run. The trucks are white plastic and come packaged with instructions in polybags. The kits sell for $12.95 each plus $1.50 shipping...

Make sure you get on **Precision Scale Company's** mailing list so you will receive their newsletters updating their extensive product line. Write to PSC, Box 1262 , Woodland, CA 95695...

You antique truck buffs should contact **The Jones Collection,** 1876 104-A St., Edmonton, Alberta, T6J5A4, Canada for their list of 1/16 scale blueprints of American and European truck plans. Single sheet plans sell for $4.00 and double sheets are $5.00, plus $2.00 postage...

Railhead Publications, P.O. Box 526, Canton, OH 44701 has some Waynesburg & Washington and Fifth National Narrow Gauge Convention belt buckles available. They sell for $8.00 each and are really well done...

The Southern Pacific Narrow Gauge Society, P.O. Box 661, Highland, CA 92346 wants you to know they are alive and well. It seems the newsletter editor is on active military duty which has delayed things a bit. The society plans to publish a combined October/November/December 1985 issue to get caught up...

The Friends of the East Broad Top, 13120 Bellevue St., Silver Spring, MD 20904 is looking for some workable standards for a module they are going to build in HOn3...

Mike Horner, P.O. Box 1553 345 19th St., Idaho Springs, CO 80452 has an index for the first ten volumes of the **GAZETTE**. The index is computer-generated and lists articles and columns by title. Reviews and other current materials were not indexed. The 17-page index sells for $4.00...

Michael Blazek, 3351 Nevada Ave., Costa Mesa, CA 92626 is offering scale drawings of Rio Grande Southern buildings and structures. All yard facilities and wayside structures from Ridgway to Mancos are ready. An itemized list is available for an SSAE...

The LGB Model Railroad Club, 9725 Old Creek Rd., Ventura, CA has a great calendar ready for 1986 showing LGB trains in action. The calendar sells for $5.95 postpaid...

The Scale Cabinetmaker, Dorset Publications, P.O. Box 2038, Christiansburg, VA 24136, an excellent magazine devoted to serious dollhouse modelbuilders, has been running articles on ¼-inch scale buildings. Their Fall 1985 (Vol. 9, #3) issue has full-sized, ¼-inch scale plans for the Christiansburg, Virginia depot along with an article on building it. Send $5.50 for the issue...

Pacific Rail Products, P.O. Box 1283, Manteca, CA 95336 has a line of beautifully made T-shirts with railroad designs. There are two narrow gauge designs. One shows C&S #70; the other shows D&RGW #346. PRP also has a number of standard gauge designs available. These shirts sell for $8.95 each. PRP will also do custom work. They plan to have some of M.F. Kotowski's prints on their shirts in the future...

The Journal of the Society for Models and Games from History, P.O. Box 121, Haddonfield, NJ 08033 has a photocopied magazine "occasionally" published. The first volume is a very scholarly presentation of everything you ever wanted to know about "fifty-foot auto cars." Send $3.00 for your copy...

The Mid-Atlantic Narrow Gauge Meet will be held on Feb. 22, 1986 at the home of Bill Uffelman, 6 Michael Lane, High Bridge, NJ 08829. The On3 Alpine Tunnel district layout will operate from 12:30 to 5:30 p.m. There will be a popular model contest. Send an SSAE or phone 201/638-4714 for details...

The Rock Quarry changed ownership as of September 21, 1985. The Rock Quarry's line of crushed rock, barbed wire, and dusting kits are again available. Write to them at P.O. Box 26372, Dallas, TX 75226 for details...

The famous **Slim Gauge Guild** is rising Phoenix-like from the rubble of its former layout which was destroyed in 1980. If you are interested in joining the new club, call Brian Brooks at 818/796-7791. The club has secured 1800 square feet in the Los Angeles area...

RAILHEAD PUBLICATIONS

. . . announces its latest arrivals!

REQUIEM FOR THE NARROW GAUGE
— ROSS GRENARD
- Covers the fateful period between 1947 and 1952 on the D&RGW and RGS
- 136+ pages, photos and material. 8½ x 11
- $12.95 paper, $24.95 cloth.

PLUS OR MINUS TWO FEET
— CHARLES S. SMALL
- First of 3 volumes on the narrowest of N.G. railroading in Brazil, which lasted until relatively recently
- 100+ pages, photos, maps.
- $14.95 paper

THE BRIGDTON NARROW GAUGE
— EDGAR T. MEAD
- Covers the Bridgton & Saco River Railroad from 1880-1930, told by one who was there
- 42 pages, photos, maps, drawings, removable centerfold
- $7.95 paper

NARROW GAUGE IN A KINGDOM
— J.C. CONDE
- Story of the Hawaiian Railroad Company's construction through nearly impossible terrain (1878-1879)
- 96 pages, photos, reports, once-lost documents
- $12.95 paper

MINING TOWN TROLLEYS
— RICHARD V. FRANCAVIGLIA
- The story of the Warren-Bisbee Railway's (1907-1928) service to its mining district
- 48 pages
- $7.95 paper.

IRON HORSES - IRON MEN
— JEAN DREHER
- Powerful novel based on the real-life story of the Bessemer & Lake Erie's steam era (Pennsylvania), written by the daughter of a B&LE man.
- $5.95 paper, $14.95 cloth.

1943 PORTER STEAM LOCOMOTIVES
- Catalog reprint, 72 pages
- $8.95

SHORT & NARROW RAILS
- A bi-monthly magazine featuring the best in shortline and narrow gauge prototype material.
- 36-44 pages, 8½ x 11.
- Subscription rates - 6 issues: $16.00, 12 issues: $30.00 (Dealers - Min. 5 copies, 25% dis.) Back issues available.

To receive our complete catalog, just send a stamp to: Railhead Publications, P.O. Box 526, Canton, OH 44701.

HO
NEW
STACKS

SQUARE
CC-6

OCTAGONAL
CC-7

70' BRICK CHIMNEYS OF HYDROCAL COLORED AND READY TO USE

$5.95 ea
plus
$1.50
shipping

CIBOLO CROSSING
UNIVERSAL CITY, TEXAS

P.O. BOX 2640
78148-1640

WB VIDEO PRODUCTIONS

PRESENTS

Rio Grande OF THE ROCKIES

Railroading in the 50's on the D&RGW

★ ★ ★ ★

From the Film Library of the
ROCKY MOUNTAIN RAILROAD CLUB

No. 2 in a series from the
IRVING E. AUGUST COLLECTION

STANDARD GAUGE 2-8-8-2's on Tennessee Pass and helping F-9's to Moffat Tunnel. Runby California Zephyr with PA power. (23 min.)

NARROW GAUGE on Marshall Pass, Monarch, Durango, Gunnison, Crested Butte. K-27 #453, C-16 #268, C-18 #318, K-28's, K-36's, K-37's. (36 Min.)

59 Minutes, Color (4 min. B&W) Dubbed Sound, Narration.

Now available in
VHS • 8mm Video • Beta II VIDEO CASSETTES

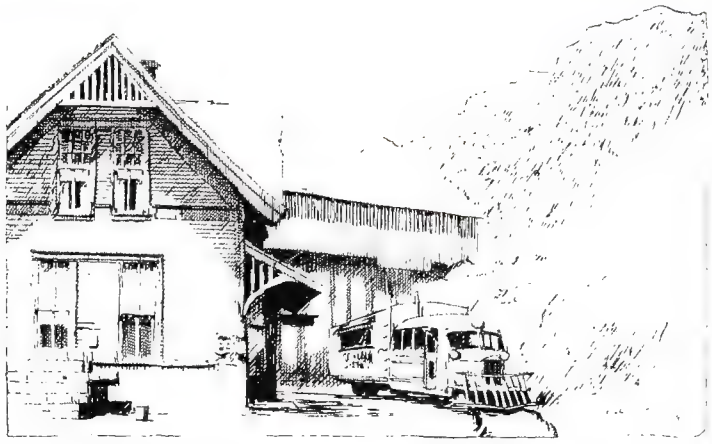
$64.95

Postpaid. Specify Your Format
VISA or MasterCard. Phone (303) 770-8421
Dealers Welcome

OTHER TAPES AVAILABLE
WRITE FOR BROCHURE

WB VIDEO PRODUCTIONS
6447 S. Heritage Pl. W., Englewood, CO 80111

The Narrow Gauge SCENE



by Charlie Getz Photos by the author

NARROW GAUGE IN PARADISE

Picture yourself lying on a sparkling white beach on a sunny day. Trade winds rustle gently in nearby palm trees, the ocean is turquoise blue, the land a verdant green. An aroma of tropical flowers and other growing things saturates the moist air. The only sound is the constant rhythm of the surf. Paradise? Almost. Suddenly the shrill cry of a steam locomotive's whistle makes the idyllic scene complete. Impossible? No – it's the island of Maui, Hawaii.

The locomotive belongs to Hawaii's only operating narrow gauge railroad: the Lahaina, Kannapali & Pacific. I always ride this last constructed of the Hawaiian narrow gauge lines when I'm on Maui. Although the LK&P runs five round trips a day and carried more than 200,000 passengers in 1984, it's the sole remaining remnant of a once vast narrow gauge empire.

The LK&P was the brainchild of A.W. McKelvey who was struck by the beauty of Maui as a tourist in 1966. While studying the history of Lahaina and its landmark, the Pioneer Mill, McKelvey discovered that this sugar cane mill once operated its own 30-inch gauge railroad, transporting cane from the fields to the mill for processing. This line was dismantled in 1952 in favor of trucks and the roadbed was converted to a dirt road. It was McKelvey's idea to reconstruct part of this railroad to the more common 36-inch gauge and operate it as a tourist attraction. In the early 1970s Maui underwent a boom in tourism; many hotels and condominiums were built. In this expansive environment a narrow gauge tourist railroad looked like a sure thing.

With the financial help of a partner, Makai Corporation, McKelvey obtained approval for his railroad. The line (about four miles long) followed part of the old roadbed, skirting a golf course and some luxury condominiums. The line originates at a new, yet "typically" Hawaiian station near Lahaina, adjacent to the still-operating Pioneer Mill. From Lahaina the line runs through cane fields, past new condominiums, over the expensive and unnecessary – though dramatic – Hahaka Trestle to the Kannapali resort area, about three miles from Lahaina. Nearly a half mile farther at Puukolii, a balloon loop around industrial buildings allows the trains to be turned.

The LK&P did not skimp on construction. The track was laid on excellent gravel roadbed with new ties, tie plates and 60-pound rail. Although dust from Maui's distinctive red soil covers everything, the track requires a minimum of attention, and the ties are expected to last for 40 years.

The LK&P has three pieces of motive power, although one is currently inoperable. LK&P #3 (MYRTLE) is a 2-4-0 with an interesting history. She was built by Porter in 1943 as a saturated-steam, slide-valve 0-4-0 for the Carbon Limestone Company of Carbon, Ohio. The LK&P converted her into a 2-4-0, applied a slightly gaudy paint scheme and pressed her into service. Originally designed for 38-inch gauge, her wide tires made conversion to 36-inch gauge relatively easy.

The other steamer, LK&P #1, the ANAKA, a 2-4-2, is another ex-Carbon Limestone Company 0-4-0T, built in 1943. She was the LK&P's first locomotive and was tested on the East Broad Top prior to being shipped to Hawaii. She is currently being rebuilt "on property" but her need for a new boiler has temporarily delayed the reconstruction.

The remaining piece of LK&P motive power is Plymouth Diesel #45, built for another Hawaiian line, the Oahu Railway, in 1959. The Oahu narrow gauge line was betting on obtaining a considerable chunk of the container business on the Honolulu docks and Diesel #45 was ordered to handle that business. The business, however, never developed and #45 ended up on the LK&P. She is used for yard work and as a backup for MYRTLE.

LK&P rolling stock consists of four passenger cars, three of which were constructed to resemble Hawaiian Railway equipment. Their sides are fiberglass-scribed to resemble wood. The trucks for these cars (and for the tenders of the locomotives) were constructed by Keystone Light Railway Company, headed by Carl Auel of Auel O Scale Trucks. The fourth passenger car was built by the LK&P from an old Oahu Railway flatcar in 1984.

The structures of the LK&P are simple and unpretentious. In the finest Hawaiian

Kannapali Station on Maui waits beneath towering palms for the next of the five Lahaina, Kannapali & Pacific trains that arrive there daily.

tradition, the Lahaina Station is open-air. The gift shop is in an old coach from the defunct Kahului Railway. The coach sits on reconstructed Carter Brothers Trucks with one journal box still displaying the distinctive Carter "star." The Kannapali Station features a small water tank, but the Puukolii Station consists of just a sign and a parking lot. An open-air engine house at Puukolii handles minor repairs and is "home" for the engine each night. A tank car and an ancient flatcar are the sole pieces of freight equipment in the small yard. A company truck is used to pick up fuel for MYRTLE, which burns used crankcase oil from Maui's gas stations.

In spite of its site in "paradise," the LK&P has not had uninterrupted success. In 1972 the line ceased operations because its revenues were just not enough to support it. In 1973 Kyle Railways (operator of the Cumbres & Toltec Scenic Railway in New Mexico and Colorado) took over the LK&P. Kyle has operated it ever since under the direction of able managers, including Dan Ranger and Gary Getman. Ranger, author of *Pacific Coast Shay* (Golden West Books, San Marino, California 1964), helped get the LK&P back on its feet with an aggressive promotional campaign and a cost-cutting program. Ranger is now back at the CT&S while Getman, formerly of the CT&S, continues Ranger's tradition of efficient management.

The LK&P currently operates five round-trip trains every day. The ride through lush sugar cane and past ocean vistas features a "singing conductor" who describes Hawaii's traditions. Shuttle buses whisk tourists from Lahaina to the railroad and back. The railroad is very popular with tourists from Japan; half of the brochures distributed by the railroad are printed in Japanese.

The future of the LK&P appears bright. Tourism on Maui is fairly constant year-round but there is a "high season" from November 15 to April 15 when the island is at its loveliest, and the weather in the rest of the United States is at its worst. Although it's not an authentic "sugar cane railroad," the LK&P offers a pleasant appearance and a ride behind MYRTLE on a clear sunny day with the mixed aromas of oil, smoke, tropical flowers, and sugar cane is a heady experience indeed.

The first book on the Hawaiian narrow gauge railroads was the rather obscure, self-published *Hawaiian Railroads* by John Hungerford (Hungerford Press, Reseda, California 1963). But since then, Hawaiian narrow gauge has been surprisingly well covered, largely due to the efforts of Jay Conde and Gerald Best. Conde, a retired United Airlines pilot, made good use of his frequent layover time in Hawaii to research the railroads. Ultimately he authored a series of books on the Hawaiian lines published by Glenwood Publishers (Felton, California), including *Narrow Gauge in a Kingdom* (1971), *Sugar Trains Pictorial* (1975) and with railroad historian and author Gerald Best, *Sugar Trains* (1973). Best also authored *Railroads of Hawaii*

The 3-foot gauge, 2-4-0 MYRTLE is the LK&P's current steam motive power; she was built by Porter in 1943 as a saturated-steam, slide-valve 0-4-0T.

The Lahaina, Kannapali & Pacific right-of-way has to be some of the most valuable in the world. As this train crosses the Hahaka Trestle, its passengers get a view of the Pacific Ocean, Maui's sister island of Molokai, and a row of luxury condominiums.

Repairs – Hawaiian style. On the right, Rich Braden, former engineer on the Cumbres & Toltec Scenic Railway, and an unidentified worker prepare to get this Lahina, Kannapali & Pacific tender back in service.

(Golden West Books, San Marino, California 1978). To my knowledge, these books are all out of print.

Conde's and Best's books contain enough information and photos for a modeler to begin to re-create these roads. However, there have also been a few articles on the Hawaiian narrow gauge lines in model periodicals. For example, John Hungerford had an article on Hawaiian narrow gauge in the December 1963 TRAINS and Bill Middleton wrote an article, "Hawaiian Railroading Today," in the July 1968 issue of that magazine. Even though the last narrow gauge "sugar line" stopped running in 1967, in 1968 a remnant of the Oahu railway still operated on the docks and the U.S. Navy still operated its 58-mile-long, 3-foot gauge ammunition hauling line on Oahu. The May 1975 issue of RAIL CLASSICS had a short story on the LK&P and the April 1973 issue of the now defunct RAILROAD MODELER featured the modeling of an island railway. An 1960 issue of MODEL RAILROADER had a short feature on the Oahu Model Railroad Club located in an old Oahu Railway coach in the Ala Moana Shopping Center in Honolulu.

The Hawaiian narrow gauge lines offer intriguing possibilities for the modeler; they were built in almost every gauge possible from 2-foot to standard gauge (For example, the Pioneer Mill Railway at Lahaina was actually 30¾-inch gauge.) However, most were 36-inch gauge. Various lines offered passenger service (for mill workers) and freight service (for a variety of industries), but most of the lines merely shunted sugar cane cars from field to mill and back. The Hawaiian narrow gauge equipment was international in origin; German and American locomotives predominated. Much of the rolling stock was homemade, including some remarkably ugly cabooses. Steam power lasted well into the 1960s on Maui although on Oahu, Diesels supplied the power for the remnants of the Oahu Railway that lasted into the 1950s. Because of the mild climate, equipment survived to a venerable age. When they were discovered by the railfan community in the the late 1940s and early 1950s, the surviving roads had reached that state of funky disrepair so typical of aging narrow gauge lines everywhere.

The Hawaiian lines have all the charm of narrow gauge and their corporate maneuvers are as interesting as those of the Denver and Rio Grande. Though little if anything is left of the "sugar lines" themselves, you can still go to Maui and hear the whistle of a steam locomotive on a romantic tropical evening as the sun sinks over Molokai.

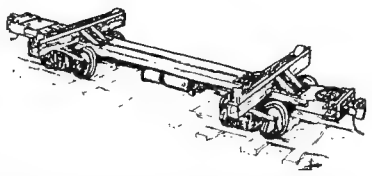
My thanks to Gary Getman and the management at Kyle Railways for their generous assistance on my visits to Maui. Until next time, then. Write – if the mood strikes.

Charlie

AMERICAN MODEL BUILDERS, INC.

Now Shipping

Kit 101 HO Jaw Crusher	$10.95
Kit 102 HO Ten Stamp	$34.95
Kit 103 HO Ore Feeders	$ 7.95
Kit 104 HO Wilfley Table	TBA
Kit 201 HO 8 Ton Coal Shed	$ 3.25
Kit 202 HO Hose House w/Reel and Buckets	TBA
Kit 203 HO Hose Reel & Buckets	TBA
Kit 204 HO Oil & Lantern Shed	TBA
Kit 205 HO Wheel Stops 2 pr.	$ 1.50



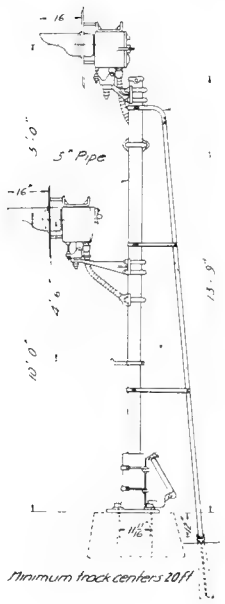
Kit 301 O Narrow Gauge Log Car (L/TC)$12.95

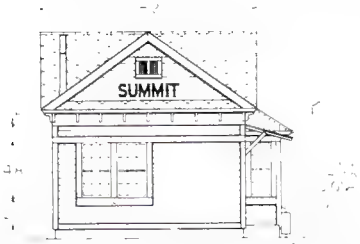
1408 HANLEY INDUSTRIAL COURT • ST. LOUIS, MISSOURI 63144-1916

MODELING CAJON

By Pete Youngblood

Whether you're a beginner or a veteran modeler, this new book is for you! Cajon Pass . . . Sullivan's Curve . . . Summit . . . double track and sidings—it can all be yours and Pete Youngblood tells how to do it with layouts tied to prototype maps, HO scale plans for buildings, signals, stations— the works! Prototype and model photos galore! Buy both books for an even better picture of the railroad wonder that is Cajon!





72 pages, 120 photos and plans, softbound 8½x11". ISBN 87046-073-0.
(Trans-Anglo No. 273) . . . $9.95
(Add .85 p/h; Californians add 6% sales tax; 6½% LA Co.)

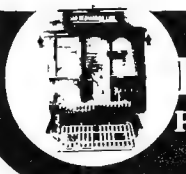
And there's a great new prototype Cajon history with a treasury of great color + black/white photos. It's

Chard Walker's CAJON

RAIL PASSAGE TO THE PACIFIC

256 pages, 350+ photos including color section, maps and artwork by John Signor, timetables, appendix. Hardbound with Howard Fogg color jacket, 8½x11". ISBN 87046-072-Z.
(Trans-Anglo No. 272) $45.95
(Add $1.50 p/h; Californians add 6% sales tax; 6½% LA Co.)

ORDER BOTH TODAY!



TRANS-ANGLO BOOKS
INTERURBAN PRESS
P.O. Box 6444 • Glendale, CA 91205

Collector Marketplace

The New National Classified Ad Magazine
for Collectable Toys & Trains

SUBSCRIBE TODAY &
Let Collector Marketplace Bring You Enjoyable Arm Chair Reading that can Help You Become a More Knowledgeable Collector or Seller of Toys & Trains... Informed of Shows, Auctions, Events, Books and Aware of Restoration Services.

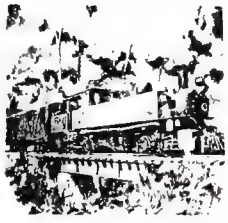
Just Indicate Which Section You Want Your Ad to Appear...
WANTED or FOR SALE
■ TRAINS ■ TRACTORS & FARM EQUIPMENT
■ CARS & TRUCKS ■ OTHER TOYS ■ DOLLS

For More Information Contact:
SHARPE PUBLICATIONS
1550 TERRITORIAL ROAD
BENTON HARBOR, MI 49022

Have a FREE COPY of
Collector Marketplace On Us!
If We Receive Your Ad for the Premier March/April Issue Before Feb. 25 1986, You'll Receive Your First Issue Free, Plus 50% Off Our Regular Classified Rates.

Regular CLASSIFIED RATES Are 10¢ per Word, with a Minimum of $2.00 per Ad.

SAVE! Introductory One Year (6 issues) Subscription Rate is $5.95, Which Includes One FREE Ad with Your Subscription.



2.

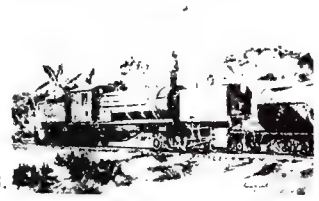
1.

COLOR PRINTS !

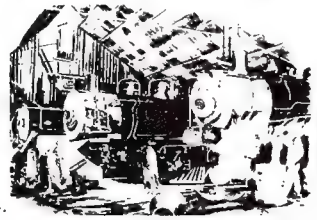
FROM WATERCOLORS BY ARIAS - DE - GREIFF
NARROW GAGE LOCOMOTIVES DOWN SOUTH
19 1/4" x 13 5/8", SIGNED AND NUMBERED,
LIMITED EDITION OF 500
PRINTED ON PROPALCOTE 200 PAPER
No. 1 - Baldwin 4-8-2 No. 123 at Dawn
No. 2 - Kitson 150 at Girardot
No. 3 - Dorada Railway Beyer Peacock No. 17
No. 4 - At Nordeste Shop in 1962

$20 EACH, $75 SET OF 4, POSTPAID

Send check or money order to GUSTAVO ARIAS
c/o QUEEN CITY TRADING CO., DEPT 101
1599 CENTRAL PARKWAY CINCINNATI, OHIO 45214
(OHIO RESIDENTS ADD 5½% SALES TAX)



3.



4.

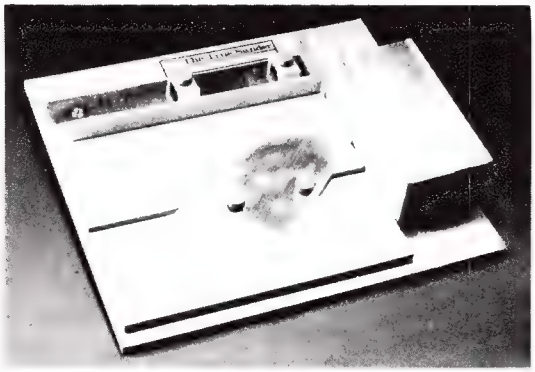
SQUARE CUTS AND ACCURATE ANGLES

QUALITY CRAFTSMANSHIP

FOR WOODWORKERS DEALING IN ACCURACY AND DETAIL

THE CHOPPER

One of the most useful tools ever for builders working with wood or styrene strip materials. Provides clean, neat, and accurate cuts quickly and easily. Adjustable stop permits exact duplication of pieces up to 3¼" in length. Pre-set mitre guides assure accurate 30, 45, and 60 degree angle cuts. Uses easily obtainable single edge razor blades for cutting blade. Base is 7¼"x 7¼". 49-4 $16.95. Also available: **The Chopper III** with a larger 18" long base for more versatility and multiple set-ups. 59-4 $24.95



THE TRUE SANDER

A tool designed to compliment the Chopper by providing quick, accurate finish sanding of end cuts on wood or plastic parts for fine fit. An adjustable angle guide allows you to produce any angle for proper fit on mitred corners. Also included are pre-set 30, 45, and 60 degree mitre guides. Unlike some motor powered sanding tools, the True Sander gives you that delicate touch needed when working with small parts. 57-4 $22.95

Ask for these fine tools at your hobby shop, inquire or order direct if unable to find them. Hobby Retailers: Order from your distributor or direct.

NORTHWEST SHORT LINE
BOX 423-PW, SEATTLE, WA 98111

AN Sn20 PORTER 0-4-4T

by Michael W. Conder

I was inspired to build a model of a 20-inch gauge Porter after I saw COPPER-HEAD (Arizona Copper Company #8) on display in Clifton, Arizona. I decided to build my model of this little Clifton-Morenci mining district engine in Sn20 because my local hobby shop was having a sale on Bachmann N scale 0-4-0 Dockside switchers. N gauge works out to 20 inches in S scale so these engines were a perfect starting point for my model. Moreover, I had some detail parts left over from an unfinished Roundhouse Products 2-8-0 that were perfect for use on my Porter.

I began construction by removing the Bachmann superstructure and retaining the smoke stack for future use. The N scale wheel flanges looked too large to me so I filed them down. Then I built a sub-frame for the cab and fuel bunker out of styrene and wood and attached it to the boiler weight. I made sure this assembly could be removed in case I had to get to the motor.

I did very little work on the Bachmann running gear. I did enlarge the styrene cylinders with a length of ¼-inch diameter aluminum tubing slipped over the original cylinders. The top of the steam chest was also enlarged with laminated .010 styrene strips. I filled in all the gaps with Squadron Green Stuff and sanded everything smooth. The brake shoes came from an old E&B Valley coach kit. They were cut to size and glued to the chassis.

The sand and steam domes and the water hatch were somewhat difficult to build. The sand dome started out as an HO scale brass casting. I filed the sides to get a more vertical profile and added sand pipes made out of copper tubing and brass wire. The steam dome came from an HO scale Roundhouse Products detail casting kit. I turned it to shape on a Dremel tool using an X-acto knife. The water hatch is a motor pulley from the same detail kit filed to shape and the bell is a brass casting.

I built the backhead from laminated styrene with a rivet impressed styrene outer wrapper. Brass castings were used for the gauges, firebox door, whistle, and brake quadrant. The Johnson bar, injector, and boiler piping were built from brass wire using Tomalco valves. My cab is made of .020-inch styrene and ABS angle pieces and has a scale lumber floor.

The engineer is a modified S scale figure. Various details such as the front coupler pocket and end beam, running boards, cab trim, and steps and rear beam were built from a combination of styrene and wood, nut-bolt-washer castings, and brass wire. The rear coupler pocket is a brass casting and the rear truck is an N gauge archbar truck.

All the wood pieces were scribed to simulate wood grain and stained with Floquil Driftwood. To accentuate the grain I washed the wood parts with Tamiya Acrylic Black thinned with rubbing alcohol The rest of the model was painted with Tamiya Acrylic Black toned down with a few drops of White. The lettering is from a dry transfer sheet. The model was weathered with light tan, dark tan, and gray chalks, set with Testors Dullcote to get a good base. After the Dullcote dried I went over the model with the chalks again to bring the color back.

This little Sn20 Porter was fun and inexpensive to build; the entire model cost less than $60.00. Using N scale mechanisms and trucks in S scale is a perfect way of modeling little 20-inch mining lines such as those in Arizona. All I need to do now is convert a string of Grandt Line On2 dump cars to Sn20 and build a diorama to bring back the old days of Arizona's first railroads.

Opposite: The author's Sn20 Porter at home on a mining scene. *Photo by Lind Wickersham.*

This side view shows the unusual shape of a 20-inch gauge Porter. *Photo by Lind Wickersham.*

All this little Sn20 Porter needs is a string of Grandt Line mine cars. *Photo by Lind Wickersham.*

The inspiration for the author's Sn20 Porter was the COPPERHEAD (Arizona Copper Company #8) shown above in July, 1982. This is not the real #8 but was assembled from junkyard parts. It is on display in Clifton, Arizona, and is used for publicity events for the town. *Photo by Michael Conder.*

COPPER IN THE MOUNTAINS

A SHORT HISTORY OF THE CLIFTON-MORENCI MINING AREA, PART 1

by Michael W. Conder

INTRODUCTION

The Clifton-Morenci mining district of southeast Arizona had some of the most diverse railroad trackage in the country. Copper and gold were discovered in the area in the 1860s, development of mines began in the 1870s, and by 1880 the first railroad was in operation. This 20-inch gauge line built by the Longfellow Copper Mining Company was soon made longer and then was followed by other lines in the area. By 1910 the area was serviced by six rail systems in three gauges. The Longfellow line had been taken over by Arizona Copper Company Limited and was called the "Coronado Railroad." Its mainline had been widened to 36-inch gauge, but its mine system lines remained 20-inch gauge.

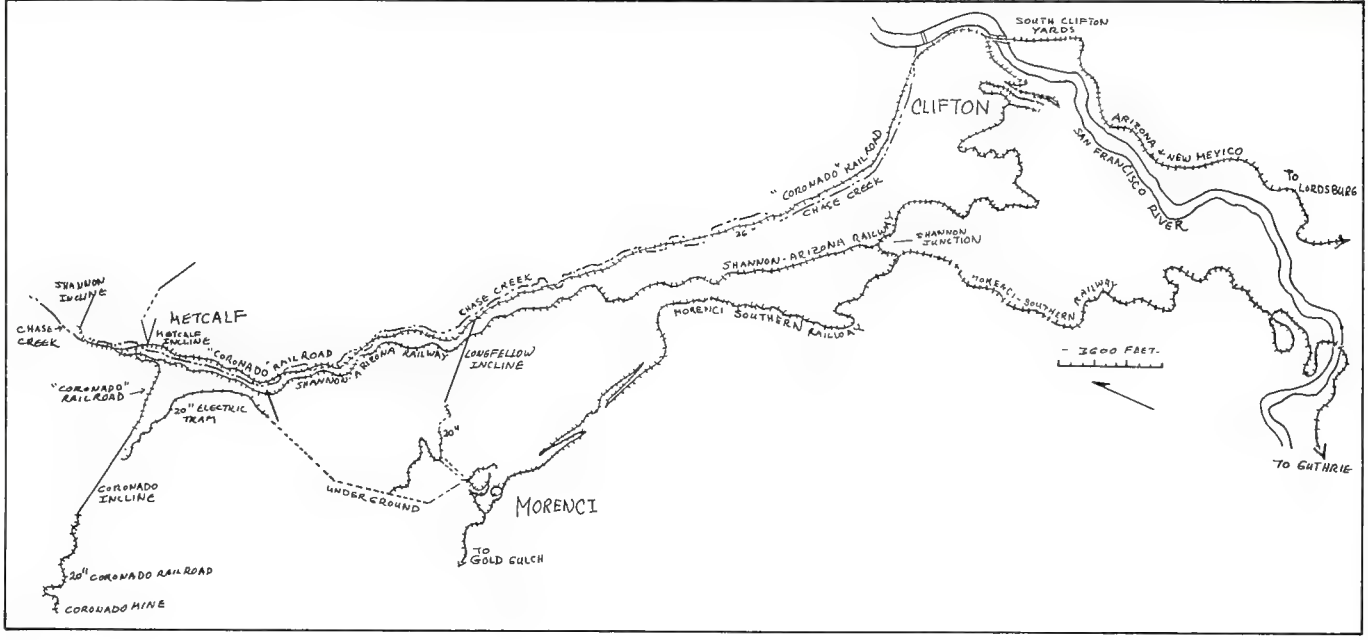
Besides these two systems there was the standard gauge Arizona and New Mexico connecting the Clifton area with the outside world via the Southern Pacific at Lordsburg, New Mexico, the 20-inch Detroit Copper Mining Company lines in Morenci, the 36-inch Morenci-Southern hauling ore from Morenci to Guthrie, and the 36-inch Shannon-Arizona, that paralleled the 36-inch part of the "Coronado" for much of its route along Chase Creek Canyon. In addition, some smaller lines as well as aerial tramways and pack trains were being used to get ore from the mines to the smelter.

The diversity of the Clifton-Morenci area has much to offer the modeler. With all the different gauges, lines, rolling stock, magnificent scenery and interesting structures, the modeling opportunities are virtually unlimited. For the narrow gaugers there are the early 20-inch and 36-inch lines; for standard gaugers there is passenger and freight steam that ran on the Arizona & New Mexico from 1910 to 1940, and in 1984 SP Diesels still operated on that line. For traction fans there are the electrified surface mine lines that ran on both 20-inch and standard gauge track between 1905 and the 1940s, as well as a smelter slag dump line that ran electric trains until 1978.

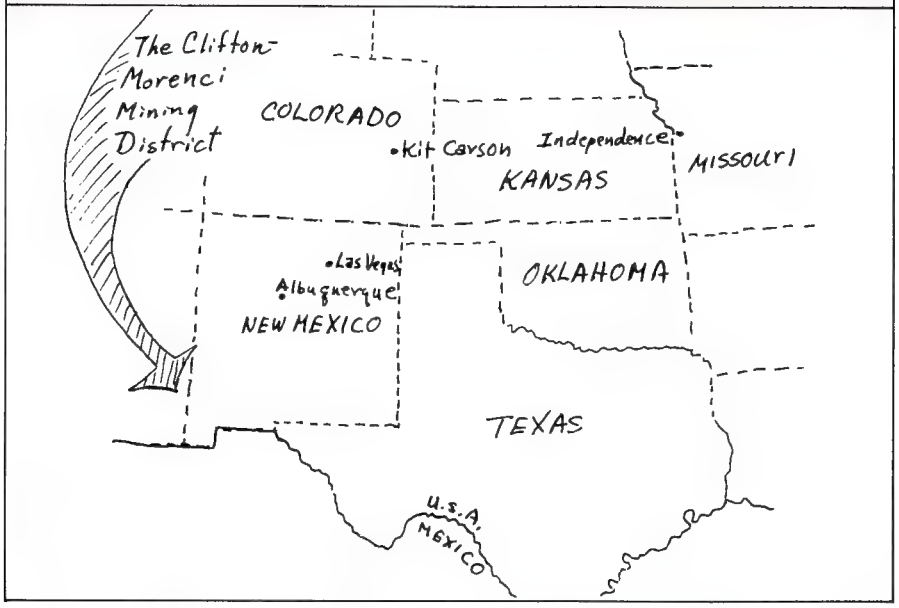
The history of the Clifton-Morenci mining district is the story of the interdependence of mines and railroads – the mines could not exist without the railroads and the railroads existed to serve the mines. By the 1860s Silver City, New Mexico, 50 miles to the east and the closest town to this area, was one of the richest sources of copper in the country. But the Clifton-Morenci area was still desolate and rugged and Indian renegades still attacked intruders. Early prospectors had found ore along the sides of the 1000-foot-deep canyons cut by Chase Creek and the San Francisco River, and in spite of the dangers, by August, 1872 a group of men had formed a company to mine claims above Chase Creek.

These claims were taken over by the incorporators of the Longfellow Copper Mining Company in May, 1874, and the new company began the long task of developing the claims into a productive mine.

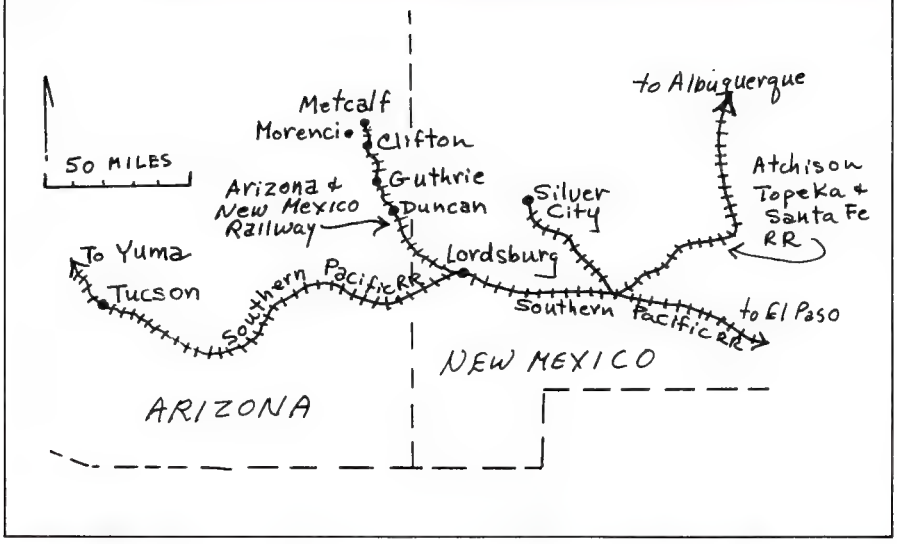
RAILROADS OF THE CLIFTON-METCALF-MORENCI MINING DISTRICT OF ARIZONA AROUND 1910



LOCATION OF THE CLIFTON-MORENCI MINING DISTRICT



SOME RAILROADS OF SOUTHERN ARIZONA AND NEW MEXICO AROUND 1884



THE LONGFELLOW COPPER MINING COMPANY

Transportation was a major problem facing the Longfellow Copper Mining Company. The mine was 900 feet above Chase Creek; once the ore was brought down the mountain it still had to be packed by burro to the nearest source of reliable water power 4½ miles down the often-dry Chase Creek to the Clifton area where a furnace for smelting the ore was built. Soon the hillsides above Chase Creek were depleted of wood to make charcoal for smelting and charcoal had to be hauled in from a distance. General supplies for the mine were brought in by ox teams from the nearest rail terminus: at first, Independence, Missouri, and later, Las Vegas, New Mexico, when the Atchison, Topeka & Santa Fe extended its line that far. Copper bullion was hauled out the same way, perhaps to other stations including Kit Carson, Colorado, a terminus of the Kansas Pacific (later the Union Pacific).

The Longfellow Copper Mining Company had a number of problems that had to be dealt with before the company could consider ways of improving transportation to and from the mine. The first company furnace had been built by experts from Mexico and it worked fine; however, it was too small to operate profitably. In June, 1874, an experienced metallurgist from Baltimore arrived and supervised the building of a new furnace. When this expensive new furnace melted and was ruined after less than 24 hours of operation, the company directors decided to build their own furnace, a round blast design with iron sides similar to the small lead blast furnaces of the day. After replacing the iron sides with cast copper the furnace worked fine and soon they had eight furnaces in operation.

The company built a dam and a flume and planned to use water to power the air blowers for the blast for the furnace. By 1875 the company was employing several hundred men. The town of Clifton that had been founded in 1873 at the intersection of Chase Creek and the San Francisco River was growing up around the Longfellow Copper Mining Company furnaces.

Ore bins along the right-of-way of the 20-inch gauge Coronado Railroad (Arizona Copper Company). *Photo, collection of the Greenlee County Historical Society, Clifton, Arizona, courtesy of Carrie Tufford.*

THE FIRST RAILROAD IN THE CLIFTON-MORENCI AREA

When the Longfellow Copper Mining Company had solved these technical problems and began producing substantial amounts of bullion, its directors turned their attention to the company's transportation needs. In 1878 they hired Nicolas S. Davis, a former Civil War army captain, to build a 20-inch gauge line. Captain Davis is purported to have had experience with 20-inch railroads in California during the 1849 Gold Rush. *(Do any readers have information to share about these?* ed.)

Captain Davis supervised construction of a 4½-mile-long, mule-powered, 20-inch gauge railroad that used 16-pound rail, had grades from 2½ to 5 percent and 90-foot radius curves. The line ran from the smelter at Clifton up Chase Creek, to the base of the mountain below the mine. The mules hauled empty cars up from the smelter to the mine, but loaded ore cars rolled down to Clifton with gravity as motive power and mules along for the ride.

At the Longfellow Incline, Captain Davis replaced the original ore chute with a gravity incline track. One-ton ore cars lowered down this track were dumped into the three-ton cars of the line to the Clifton smelter. The incline was eventually modified to haul three-ton cars up the grade to avoid transferring the ore. At the top of the incline another 20-inch gauge line connected with the mine.

By the spring of 1880 the train was making two round trips daily and the furnaces were turning out 15,000 pounds of black copper every day. Soon the mule-powered railroad would not be able to keep up with the increasing productivity of the mine. In early 1880, anticipating this eventuality, the Longfellow Copper Mining Company ordered a wood-burning locomotive from the H.K. Porter Company of Pittsburgh, Pennsylvania, to replace the mules. The locomotive was shipped by Porter in April of that year.

Although accounts vary, this engine probably went by steamship around the Horn to San Francisco, by rail to the end of the Southern Pacific Railroad in Arizona and on to Clifton by ox team. This engine was an 0-4-0T with 6 x 10-inch cylinders and 22-inch drivers. It was designed to haul ten empty cars weighing 2800 pounds each on a 4½ percent maximum grade. The little locomotive weighed 13,000 pounds with a full load of water and wood.

The engine was lettered "CORANADA" at the Porter shops but was re-named "EMMA" after the daughter of the engineer assigned to run her. EMMA was successful enough that the company ordered a second engine from Porter. Plans were made to extend the railroad up the canyon to the company's other claims at Metcalf, but this extension was not completed until 1883.

On October 18, 1880, the Southern Pacific Railroad reached Lordsburg, New Mexico, about 70 miles southwest of Clifton, Arizona. This new, nearby rail link increased the value of the Longfellow Copper Company's properties and the directors, anxious to get out from under the problems of owning a mine, put the mine, smelter and railroad on the market in 1881. By July, 1882, they had found a syndicate of Scottish investors willing to buy them out. The newly formed company, the Arizona Copper Company, was incorporated in Arizona in November, 1882, as a wholly owned subsidiary of the parent Scottish Company of the same name.

A group of Shannon Company investors on the way to tour their investment. They are on the 20-inch Coronado Railroad just upstream of the Longfellow Incline along Chase Creek. *Photo from* Souvenir of Graham County, Arizona, *by A.N. Segal, courtesy of Garrie Tufford.*

RAILROADS OF THE CLIFTON-MORENCI MINING DISTRICT OF ARIZONA: 1878-1910

RAILROAD	COMPLETION DATE	ROUTE	GAUGE
Longfellow Copper Mining/Arizona Copper Company Limited			
Longfellow Copper Mining Company	1880	Clifton-Longfellow	20"
	1882	Clifton-Coronado Incline	20"
became the:			
Arizona Copper Company Limited	1883	Clifton-Metcalf	20"
(Coronado Railroad)	1901	Clifton-Metcalf	36"
and the			
Arizona Copper Company Limited (Coronado Railroad)	1901	mining lines	20"
Clifton & Lordsburg/Arizona & New Mexico			
Clifton & Lordsburg	1883	Lordsburg-Duncan	36"
became the			
Arizona & New Mexico	1883		
Arizona & New Mexico	1901	Lordsburg-Clifton	std
Detroit Copper Mining Company			
Detroit Copper Mining Company of Arizona	1884	Morenci mining lines	20"
Detroit Copper Company/Morenci-Southern			
Detroit Copper Company (Morenci-Southern)	1901	Morenci-Guthrie	36"
Shannon-Arizona			
Shannon-Arizona	1910	Shannon Mine-Clifton (Shannon smelter)	36"

Arizona Copper Company (Coronado Railroad) #5, a 20-inch gauge Porter. This engine is one of three that remained near the Coronado mine in a derelict condition in 1984 (see page 30 of this issue). *Photo from* Souvenir of Graham County, Arizona, *by A. N. Segal, courtesy of Garrie Tufford.*

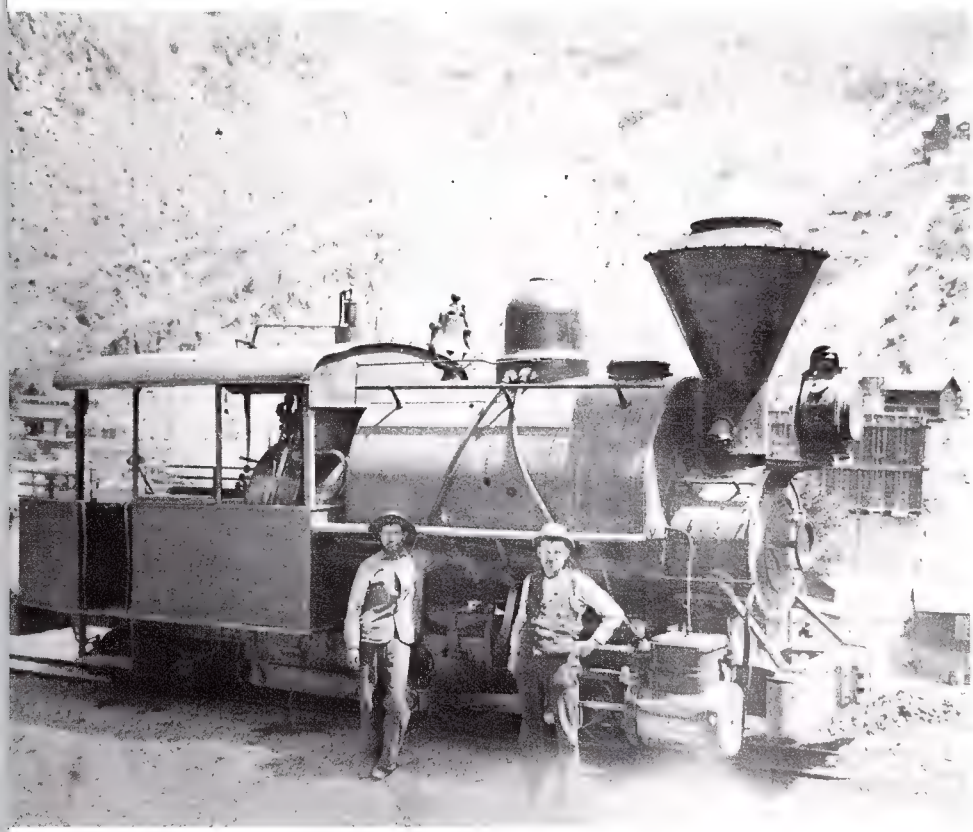
THE ARIZONA COPPER COMPANY

The directors of the new company immediately started an expansion program, spending a considerable amount of money improving the mines, rebuilding the smelting works, building a concentrator, and constructing a new flume to provide water power to drive the smelter blowers. They also began a new 36-inch gauge railroad: the Clifton & Lordsburg, to run from the SP terminus at Lordsburg to their smelter at Clifton. By the time this railroad was completed it had been reorganized and renamed the Arizona & New Mexico Railway. The Arizona & New Mexico originally owned three Porter 2-6-0 engines, 50 freight cars, and two combination cars. It had a three-stall engine house with a 45-foot diameter turntable and a coaling facility.

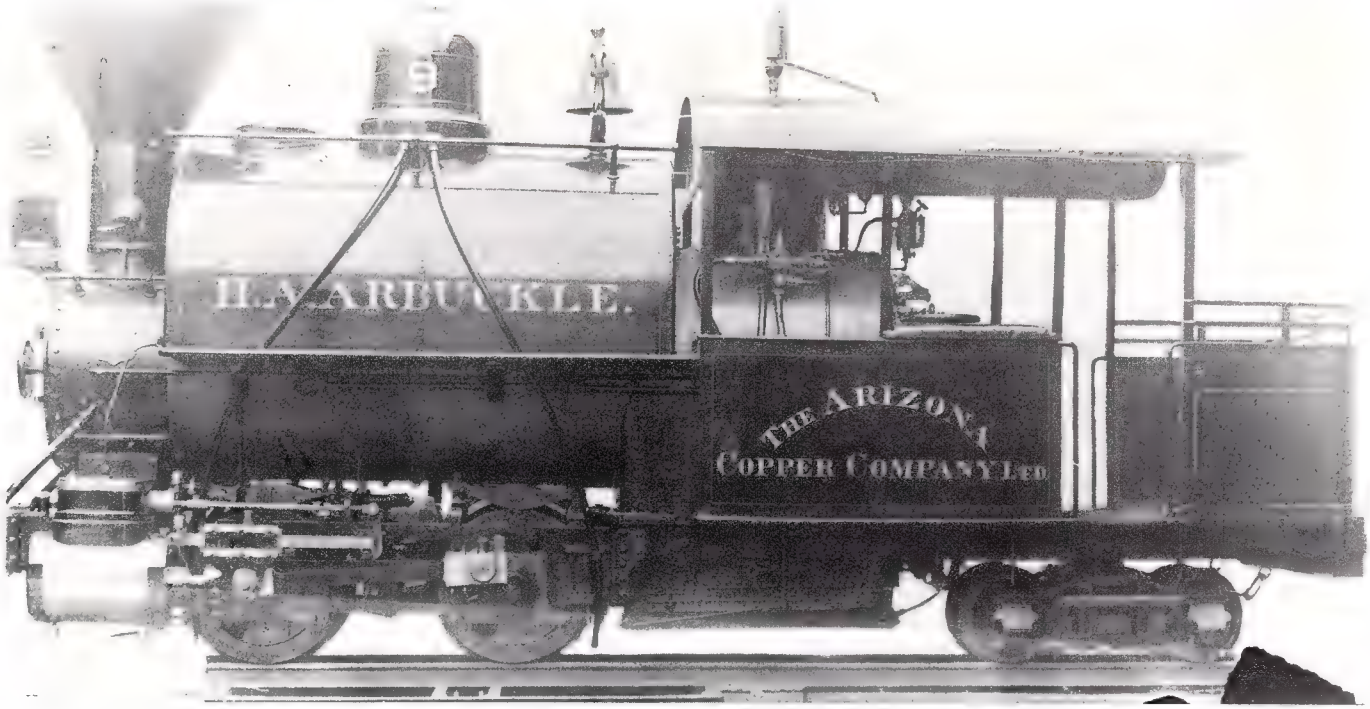
Meanwhile, the 20-inch gauge railroad had been extended from the Longfellow Incline to the Coronado Incline. The directors of the Arizona Copper Company were responsible for finally extending it on to Metcalf. By this time the little 20-inch line had become known as the "Coronado Railway," a name which stuck even though its proper name was now the Arizona Copper Company Railroad. By 1890 the Coronado Railroad had added four more Porter locomotives to haul its three-ton ore cars.

Unfortunately all of the expenditures resulting from this expansion program were too much for the new company. Efforts to obtain loans failed and by August 6, 1884, the Arizona Copper Company was reorganized as a new company with an identical name. During the reorganization the mines continued to work at full pace.

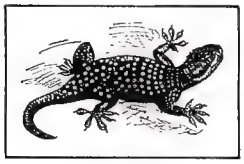
At the Coronado incline, the mine was a considerable distance away from the top of the incline, so the company found it necessary to build a 3-foot gauge line between the mine and the top of the incline. The workers hoisted three locomotives up the incline to serve on this line. (As of 1984 these locomotives were still in the desert near the Coronado Mine. See photos on page 30 of this issue.)



One of the last 20-inch gauge Porters purchased by the Arizona Copper Company. *Photo, collection of the Greenlee County Historical Society, Clifton, Arizona, courtesy Garrie Tufford.*



The 20-inch gauge H.A. ARBUCKLE, named after the first engineer on the Coronado Railroad, was acquired from Porter in 1898. *Photo, collection of Garrie Tufford.*



One of the Detroit Copper Mining Company 20-inch Porters at work on the limestone quarry at Morenci, Arizona, in 1902. *Photo from* Souvenir of Graham County, Arizona *by A. N. Segal, courtesy of Garrie Tufford.*

THE DETROIT COPPER MINING COMPANY

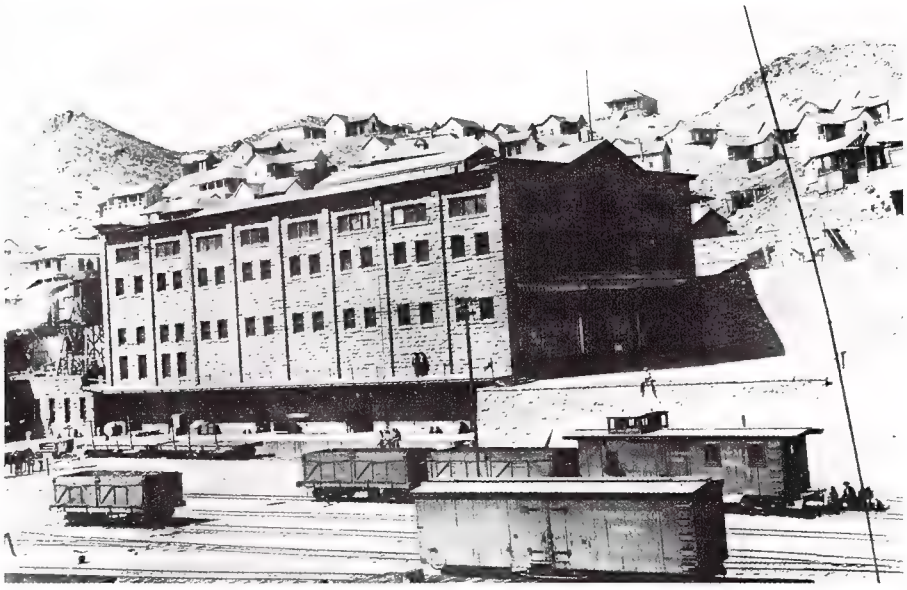
The Detroit Copper Mining Company of Arizona was incorporated on September 24, 1872, by a group of men from Michigan who owned the mining properties adjoining the Longfellow Mine. In 1880 they set up a small smelter utilizing water power from the river below Clifton. They had to haul their ore several miles by wagon to get it to this smelter. In 1884 the Detroit Copper Mining Company built a new smelter near their mines in Morenci – it was cheaper to move one ton of coke up to the new smelter than to move six tons of ore down to the old one. This move generated new revenue for the Arizona Copper Company and their railroads. The railroad brought in coke for use in the new smelter and carried copper bullion out. Eventually, revenues from the Detroit Copper Mining Company's business virtually paid the operating costs of the Arizona & New Mexico Railway.

To get water to its new smelter at Morenci, the Detroit Copper Mining Company built a dam and pumping station seven miles away on the San Francisco River. This plant operated at a pressure of 750 pounds per square inch, pumping water 1700 feet vertically, using the power of the river. This reliable source of plentiful water in this formerly dry valley made other developments possible. The Detroit Copper Mining Company built one of the largest stone buildings in Arizona to house its company store in Morenci. They erected a hotel and club for visitors and workers and, in effect, created a town where there had previously been only shacks. The company needed to move materials around the Morenci area and built a fairly extensive 20-inch railroad that used Porter locomotives similar to those of the Coronado Railroad.

For further reading:

Myrick, David, *Railroads of Arizona, Vol. III, Clifton, Morenci and Metcalf Rail and Copper Mines* (1984 Trans Anglo Books).

The Detroit Copper Mining Company of Arizona's mercantile store in Morenci around 1902. The yards in the foreground were owned by the Morenci-Southern in 1902 but they were full of old Arizona & New Mexico narrow gauge rolling stock. This building was torn down in 1978 to make way for the expanding copper mining operation at Morenci.



THE ONBOARD SYSTEM ELIMINATES THE HASSLE OF BLOCK WIRING...

With the ONBOARD System, you can run up to twenty locomotives, anywhere on your railroad, with no block wiring of any kind. And, you can have exhaust, whistle and bell sound in each loco - with all the sounds controlled individually. You'll make an immense improvement in your railroad, and your enjoyment of it, when you convert to ONBOARD!

The ONBOARD System uses constant dc voltage on the track to provide power for motors, lights, and the locomotive-mounted electronic equipment. Control signals generated by handheld keypads are superimposed on the track power.

The ONBOARD System is highly reliable, the control signals being generated by quartz crystal controlled oscillators. The signals never drift with age or temperature!

Locomotive speed control using ONBOARD is simply sensational. You get extreme low speed capability, fine mid-range control, and adjustable top-speed. No conventional power-pack performs better than an ONBOARD throttle.

ONBOARD locomotive sound includes optically syncronized exhaust; automatic air pump; a six-chime, fully-adjustable whistle; and a high quality bell. Complete diesel sound is also available.

The ONBOARD System model K220 keypad provides for convenient operation of double headers. The locomotive channels are dialed in at the top of the unit. Selector switches then provide for independent or coupled control. Convenient "two-button" speed control gives prototypical locomotive performance.

The ONBOARD System has been on the market for over five years, and has proven itself to be a high-quality product capable of providing years of trouble-free service. Normally, no maintenance of any kind is required. The system carries a three year warranty.

ONBOARD

LOCOMOTIVE SOUND & CONTROL SYSTEM

ONBOARD SYSTEM INFORMATION:

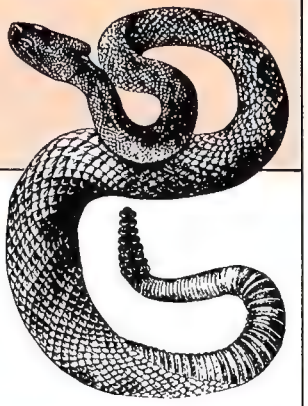
Price list & catalog $1
Cassette demonstration tape $5
System manual $12

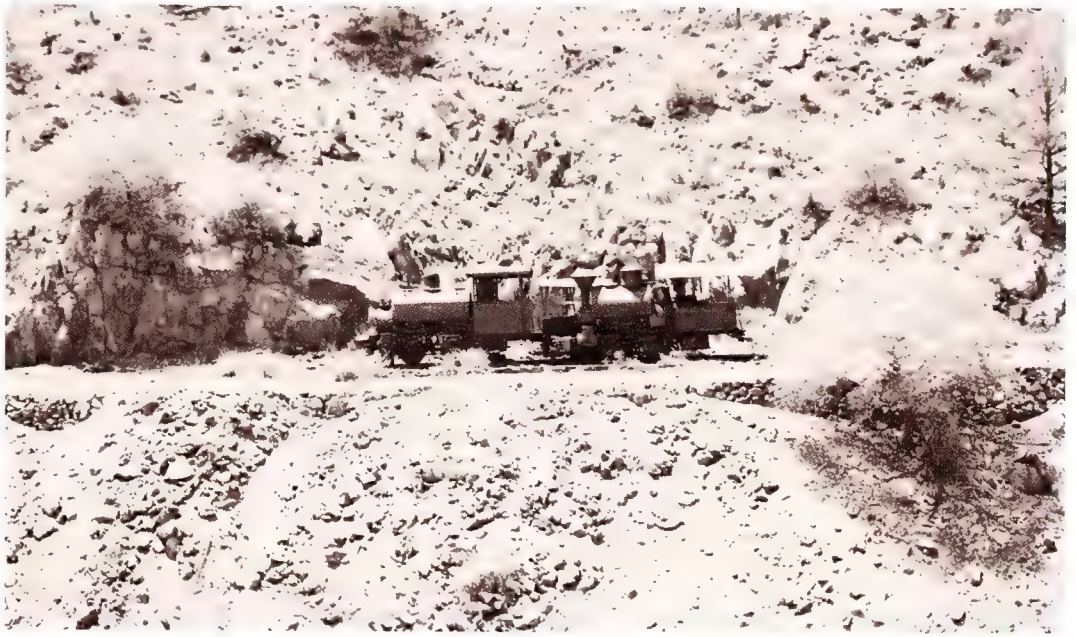
KELLER ENGINEERING
200 SAN MATEO AVENUE
LOS GATOS, CA 95030
(408) 395-3424

ARIZONA COPPER COMPANY 0-4-0

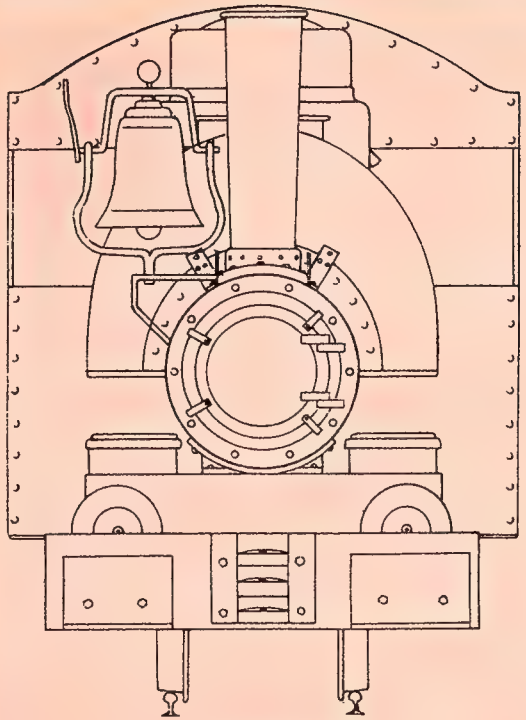
by Michael W. Conder

Photos by Stan Schwedler



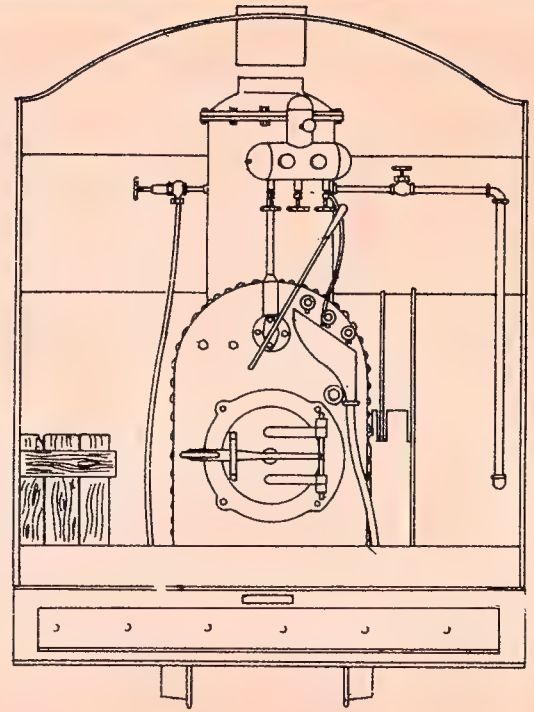


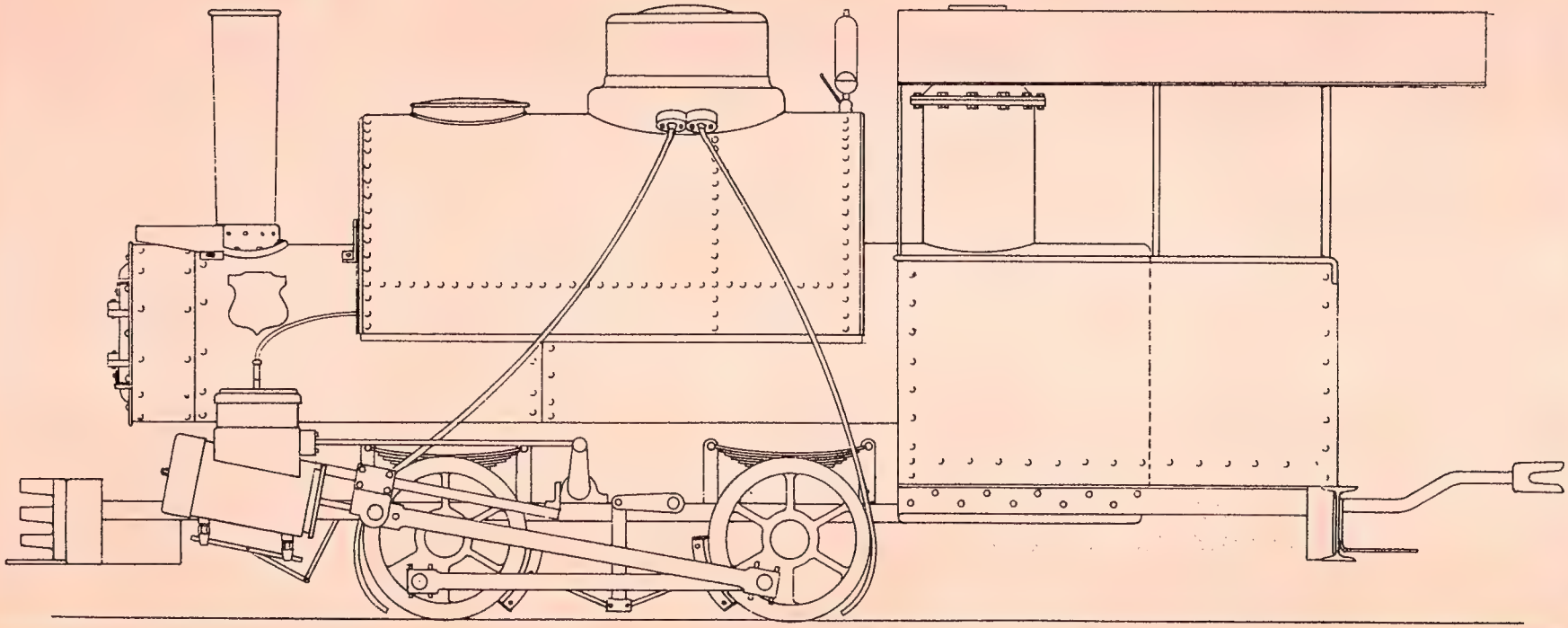
Three abandoned 20-inch gauge Porters languish at the Coronado Mine in Arizona. These photos were taken by Stan Schwedler in August, 1967, while he participated in an expedition to explore ways to bring the locomotives back to civilization. Apparently many schemes have been proposed to get these kettles out of the desert, but none of them have been carried out.



This Arizona Copper Company locomotive ran on the 20-inch "Coronado" Railroad near Clifton, Arizona until the line was widened to 36 inches in 1903. Then it continued to serve on other 20-inch mining lines in the area. Three of the ten 20-inch gauge Arizona Copper Company Ltd. Porters remain abandoned at the Coronado Mine.

Scale: ½ inch = 1 foot





An HOn30 Forney

by Garry Cerrone

Introduction

My youthful dreams of owning a pony have come and gone. But not my appreciation of the Shetland breed. When I saw my first pictures of the 2-foot gauge Forneys of the Sandy River Railroad I fell in love with their iron "Shetlands." Proportioned like their four-footed counterparts, these little steamers fascinated me with their diminutive size and narrow gauge charm.

I had been thinking about building a Forney for over a year before I started. Once I got going, the project took about a month and a half of hobby time to complete. Much of the time was spent designing and redesigning my Forney superstructure to fit on a Bachmann N gauge 0-4-0 Dockside motor and frame. Once these design problems had been worked out, I built a second Forney in only about three weeks of evenings.

To transform the Dockside into the Forney (Photo 1) and make it all fit together I had to work on my scratch-built superstructure while I was modifying the mechanism, but to simplify things I'll discuss my project in four steps: 1) frame/mechanism, 2) cab/deck, 3) boiler, and 4) tank.

Photo 1. From Bachmann N gauge 0-4-0 Dockside (left) to HOn30 Forney (right). *Photo by the author.*

Frame/Mechanism

I started by stripping the Dockside down to the mechanism, removing the boiler weight and the motor and the main rods. The frame and drivers were adjusted until they sat flat on the track and had no binds in the mechanism. Any faults were corrected by tightening up on the various screws and carefully bending the rods and frame.

To gain clearance for the new cab front I had to alter the frame by grinding off some of the front of the motor pan with a Dremel carbide grinding disk (fig. 1). Next I cut the boiler pedestal down so that it was almost level with the frame. To replace the pilot I ground off each side of the Bachmann pilot beam and ground the underneath side flat to accomodate a Kadee N gauge preassembled coupler. I made my pilot from a small piece of brass angle with soldered steps and handrail stanchions (fig. 2). The pilot was drilled and tapped 00-90 for a coupler mounting screw.

I cut off the "T" shaped "tang" on the rear end of the Bachmann frame and cemented a square of .030 styrene into the depression on the bottom side of the tang. Then I drilled and tapped a center 00-90 hole for mounting the cab and holding on the rear truck (fig. 1).

It was necessary to glue a piece of paper onto the upward projections of the motor sideframes to keep the motor brushes from shorting out on the brass boiler.

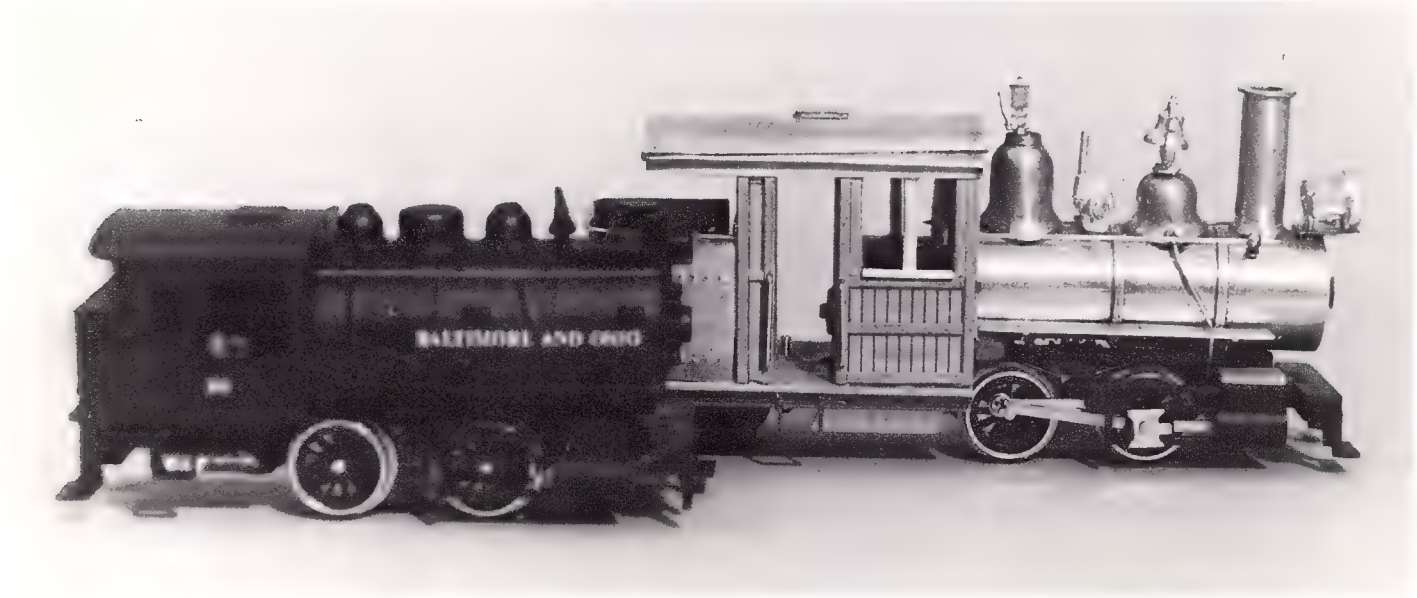
After these changes were made I reassembled the mechanism, put the N scale boiler weight back on temporarily, and made a test run.

Cab/Deck

Figure 3 and photo 4 show the cab and deck assembly. The deck is 6 feet 6 inches by 11 feet, cut to fit around the motor, and has a strip of Plastruct "I" beam around the under edge. It is attached with a 00-90 nut and bolt through the previously drilled hole in the tang on the rear of the frame. The nut was epoxied to the deck.

To make the 0-4-0 mechanism into an 0-4-4 I added a rear truck by modifying a Kadee #1023 truck with couplers (Photo 4). The added styrene strip shown was drilled at one end for the truck kingpin and at the other for a 00-90 screw which fits into the nut on the cab deck. This allows the truck to swivel under the cab like a pony truck.

I primed and sanded the scribed wood for my cab and laid out the cab parts using a sharp drafting pencil (fig. 3). All the trim pieces were then carefully ACC'ed in place. Only after all the trim was mounted and dry did I cut out the windows and doors and cut the parts from the sheet of wood. The cab parts were epoxied onto the cab deck and the roof with hatch and drip rails already attached was added.



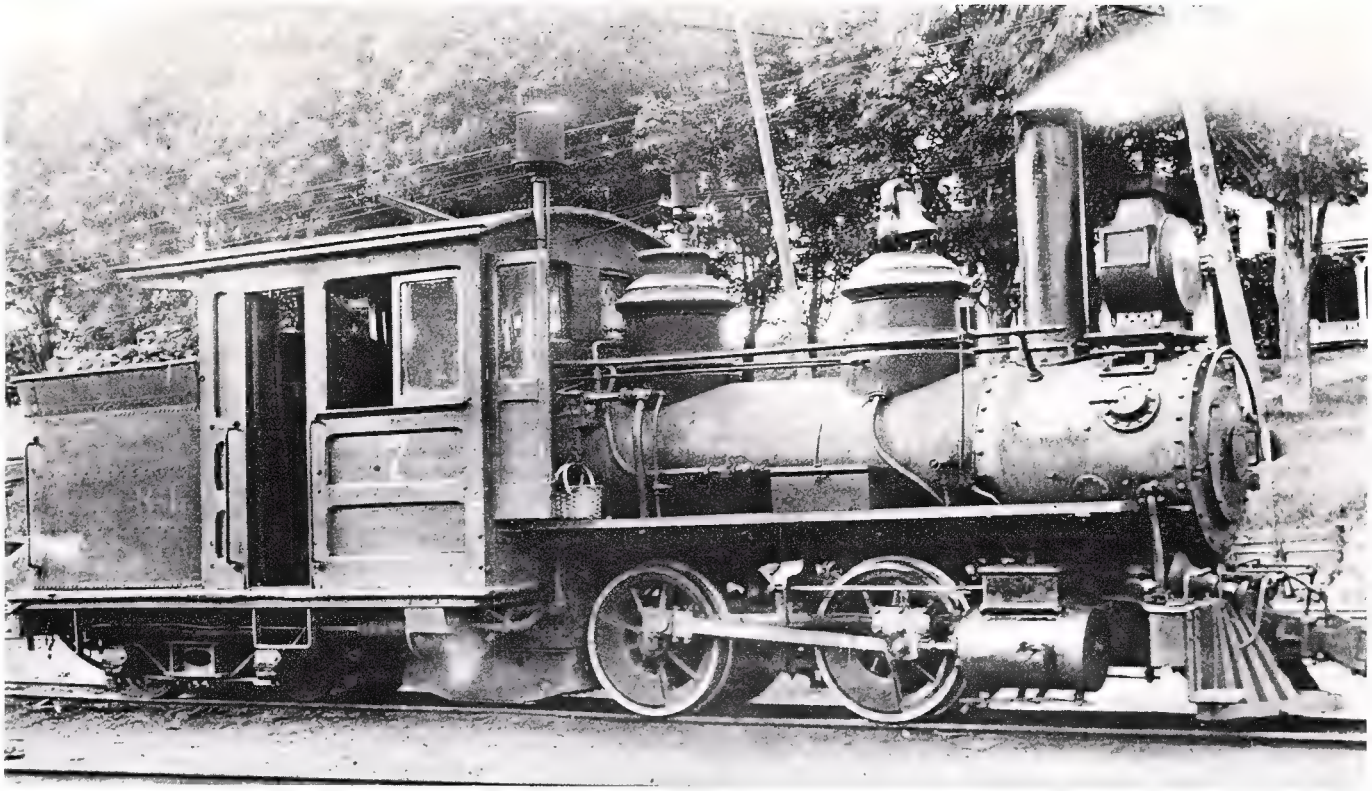


Photo 2. Number 7 on the Sandy River & Rangeley Lakes Railroad. This is the kind of "Shetland pony" that inspired the author to build his HOn30 Forney. *Photo, collection of Ed Bond.*

FIGURE 1

BACHMANN N GAUGE DOCKSIDE FRAME MODIFICATIONS

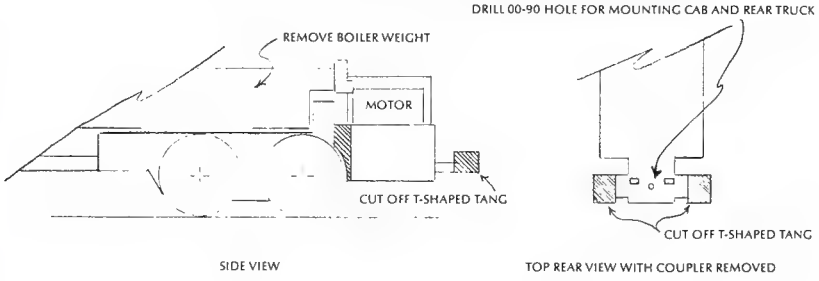

REMOVE BOILER WEIGHT
MOTOR
CUT OFF T-SHAPED TANG
SIDE VIEW
DRILL 00-90 HOLE FOR MOUNTING CAB AND REAR TRUCK
CUT OFF T-SHAPED TANG
TOP REAR VIEW WITH COUPLER REMOVED

FIGURE 2

HOn30 FORNEY

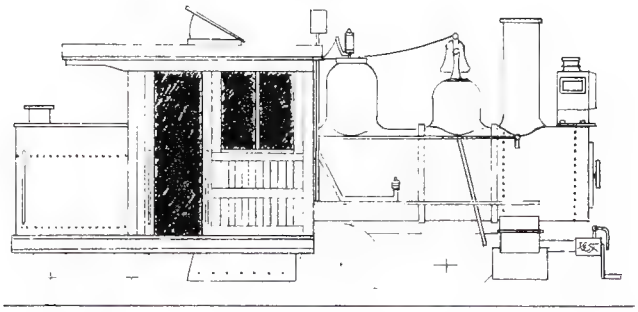
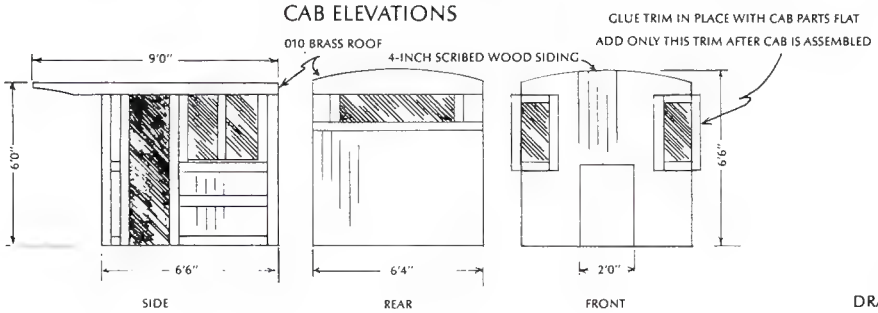


FIGURE 3

CAB ELEVATIONS



DRAWN BY G. F. CERRONE

Boiler

Meanwhile I had been altering the design I had made for my Forney so that the superstructure would fit on the N gauge mechanism. The Bachmann drivers are too close together for a Forney so I had to shorten my boiler design by about four feet.

The boiler details are shown in photo 4. I cut a slot in the tube I used for the boiler big enough to clear the gears on the drive mechanism. The boiler weight was made by pressing a boiler-sized tube into potter's clay and filling the hole with lead. With the weight in the boiler, I drilled a 2-56 hole through it for mounting the boiler on the frame. I ACC'ed my detail parts in place as shown in the photo. I made a brass boiler front out of sheet brass with Grandt Line nut/bolt/washer castings. The Keystone domes were the only ones I could get and aren't quite correct so the appearance of the boiler isn't exactly what I had planned either. After these details were attached, the boiler was epoxied to the cab. Injectors and sand pipes were made from .020 brass wire. There is an inspection plug and a vacuum brake made by running a piece of .020 wire down the front of the cab next to the boiler on the engineer's side with a 10-inch piece of larger tubing soldered to its top.

Photo 4. The components of the HOn30 Forney. *Photo by the author.*

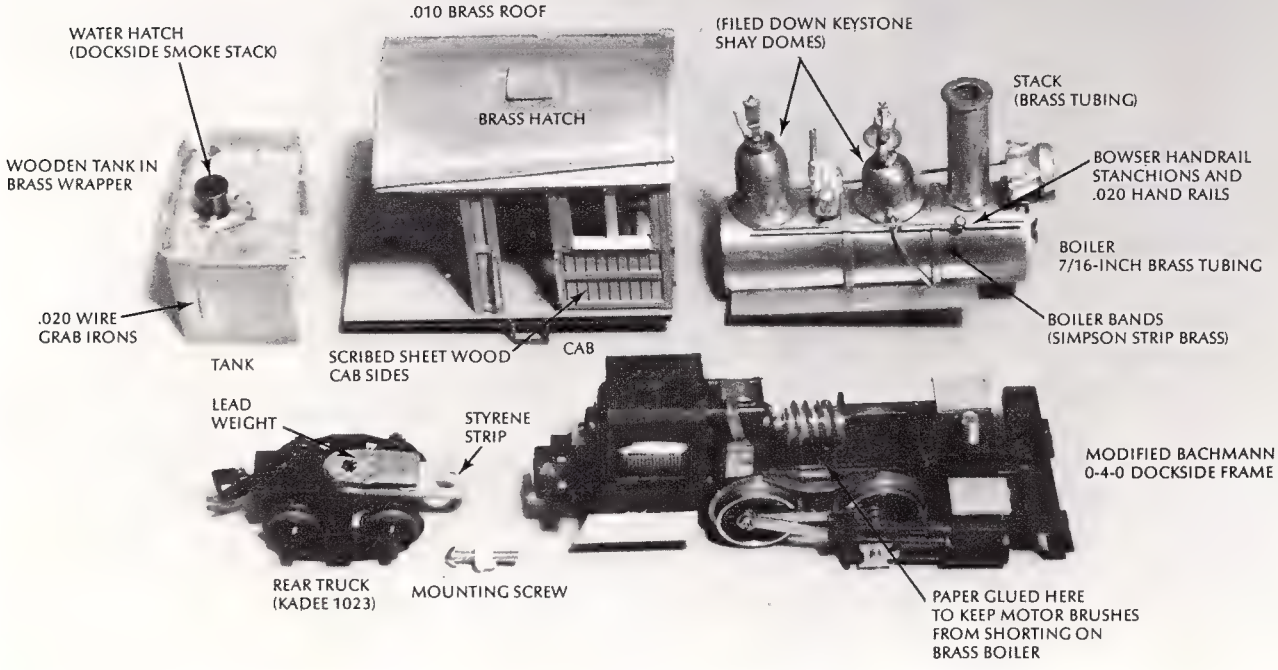
Tank

The tank is shown in photo 2. In order to accomodate the swing of the rear truck, I had to make the tank shorter than it should be for a Forney. I impressed rivets into the brass wrapper before I cut and fitted it around the wooden block.

The model was primed with Floquil Yellow Chromate primer, and painted with Floquil Engine Black mixed with a little Floquil White which gave it a nice dark grey color.

This has been a doubly enjoyable project for me – I've got a pony after all these years and I've been able to share it with others. I hope you will consider building one of these neat little engines yourself.

Photo 3. Two Forneys built by the author using the techniques described in this article. *Photo by the author.*



NOW AVAILABLE from GRANDT LINE

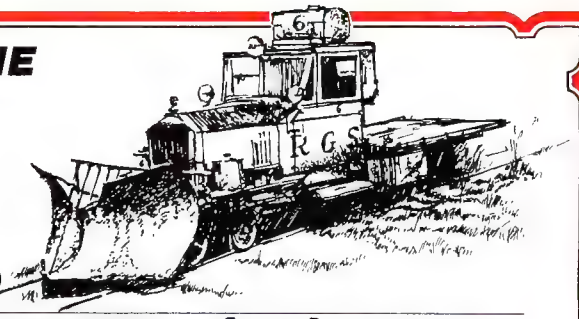
RIO GRANDE SOUTHERN

WORK GOOSE #6 *In On3!*

- ALL STYRENE CONSTRUCTION

MICRO MOTOR FOR EXCELLENT SMOOTH OPERATION

SPECIAL INTRODUCTORY PRICE $161.50



500 SO. BROADWAY, DENVER, CO 80209-4002 (303) 777-6766

CABOOSE HOBBIES

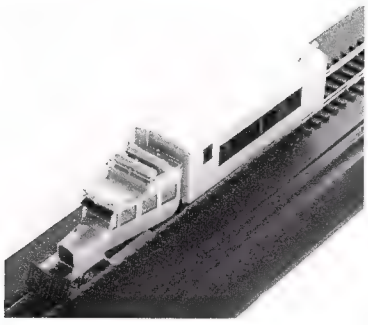
One of the Nation's Largest Train Stores

SHIPPING: USA orders over $50. NO CHARGE, (unless bulky), under $50. add $2.50 postage & handling.

WE accept all 5 major Charge Cards.

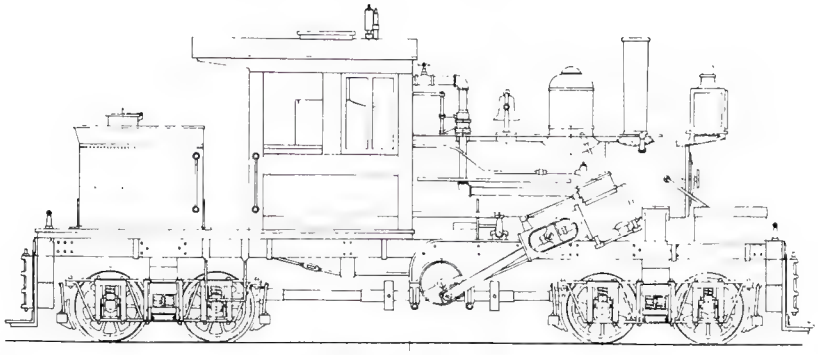
Flying Zoo

HOn3 RGS Galloping Goose #7



Ready to run / painted
$159.95
Freight version also available

JUST RELEASED — ORDER TODAY!



On3 18 ton Climax

We recommend you make an advance reservation.
DUE IN MAY 1986 — RESERVE TODAY!

Small Loco Builders Plates in HO Scale

Nicely detailed photo etchings, just fit our small engines. For 8 locos... Porter, Baldwin, Climax, Lima. $4.50 the set.

Flying Zoo

P.O. Box 3
Suginami-minami
Tokyo 168 Japan

Statement of Ownership Management and Circulation

1A. Title of Publication:
Narrow Gauge and Short Line Gazette
1B. Publication No. 00114610
2. Date of Filing: Oct. 1, 1985
3. Frequency of issue: Bi-monthly
3A. No. of issues published annually: 6 issues per year
3B. Annual Subscription Price: $18.00/year
4. Complete Mailing Address of Known Office of Publication:
P.O. Box 26
Los Altos, CA 94023-0026
5. Complete Mailing Address of Publisher, Editor, and Managing Editor:
Same
6. Full Names and Complete Mailing Address of Publisher, Editor, and Managing Editor:
Robert W. Brown,
P. O. Box 26, Los Altos, CA 94023-0026
Editor: Same
Managing Editor: Same
7. Owner:

Full Name:	Complete Mailing Address:
Benchmark Publications Ltd.	P. O. Box 26 Los Altos, CA 94023-0026
Robert W. Brown	985 Campbell Ave.
Irene L. Brown	Los Altos, CA 94022
	Same

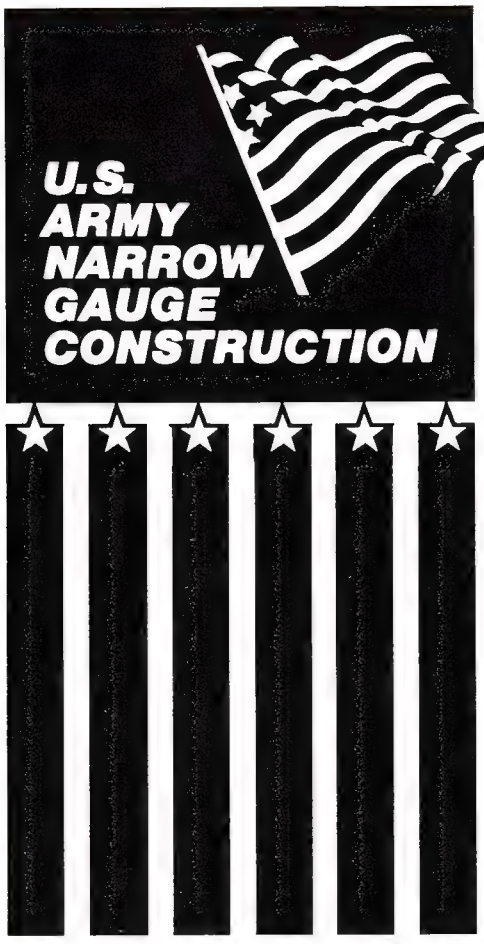
8. Known Bondholders, Mortgagees, and other Security Holders Owning or Holding 1 percent or more of Total Amount of Bonds, Mortgages or Other Securities: None
9. N/A

10. Extent and Nature of Circulation:	(*)	(**)
A. Total No. Copies (net press run):	16249	16400
B. Paid Circulation	10213	10173
1. Dealers		
2. Mail Subscription	5214	5164
C. Total Paid Circulation	15427	15337
D. Free Distribution	232	247
E. Total Distribution	15659	15584
F. Copies not distributed	513	816
1. Office use, left over, unaccounted, spoiled after printing		
2. Return from Dealers	77	0
G. Total	16249	16400

(*) Average No. copies each issue during preceding 12 months.
(**) Actual no. copies of single issue published nearest to filing date.

I certify that the statements made by me above are correct and complete.

Irene Brown, Business Manager



Railroads in the Columbia River Area

by Charles S. Small

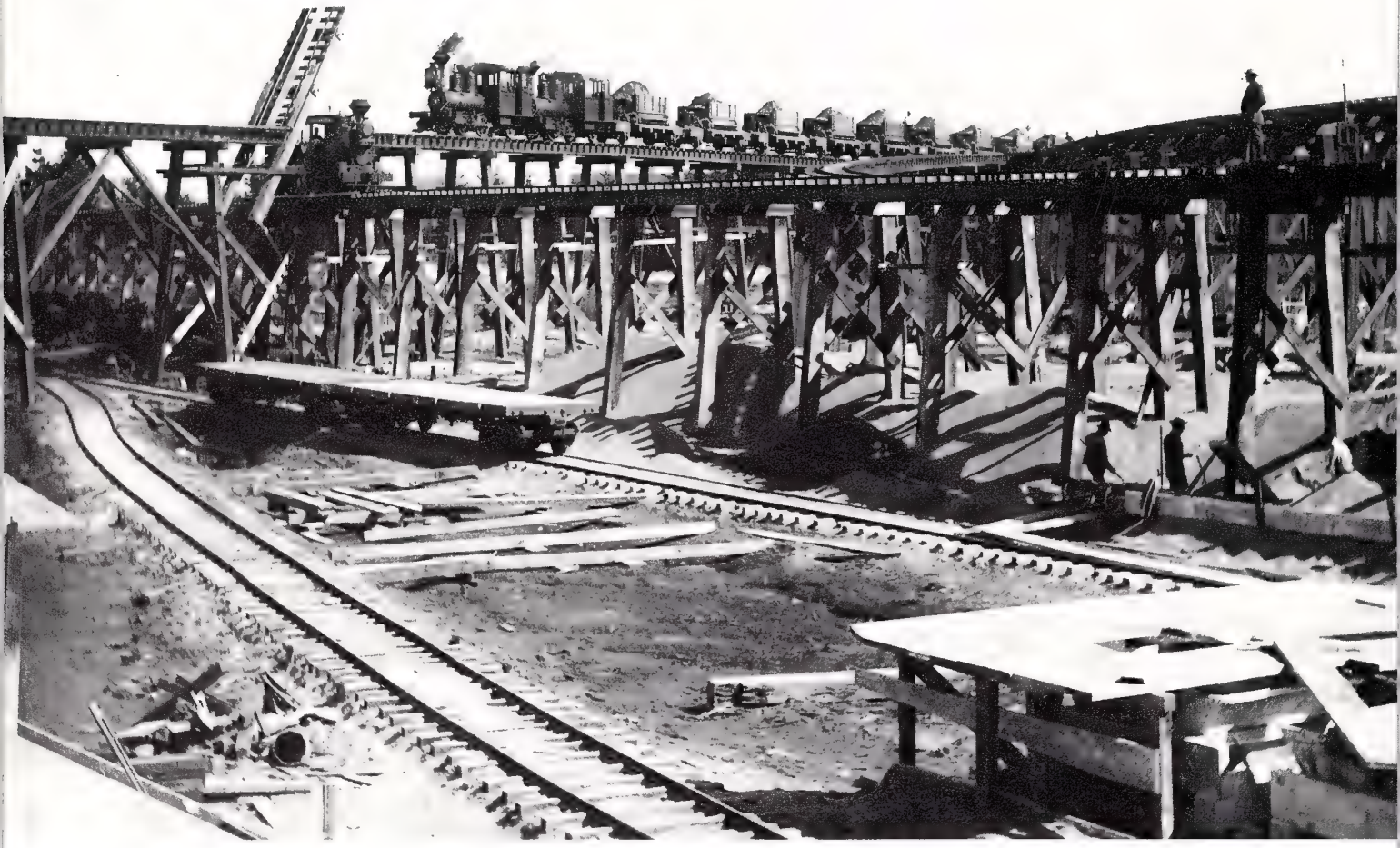
In the 1890s three of the four 3-foot gauge railroads near the mouth of the Columbia River separating Oregon and Washington were U.S. Army construction railways. The fourth was the Ilwaco Railway & Navigation Company's line that ran from Ilwaco in Baker Bay northward to Nahcotta. Completed in 1890, this line was later purchased by the Oregon Railway & Navigation Company. By 1906 it had a branch, the Columbia Valley Railroad, that extended to Megler, Oregon, via a tunnel under Fort Columbia. The three army lines were at Fort Canby and Fort Columbia on the Washington side of the river, with Fort Stevens on the Oregon side.

The 3-foot gauge army lines were built by the U.S. Army's Corps of Engineers and were used mainly in the construction of the forts. The Fort Canby line was also used to construct two breakwaters on the north side of the river. The railroad at Fort Stevens was extended and was used to build a larger and longer breakwater on the south side of the river.

The U.S. Army Corps of Engineers used small locomotives on their railroads ranging in weight from seven to 17 tons. Porter supplied 0-4-0 saddle-tank engines while Baldwin provided 0-4-2T's and 0-4-4's. The army lines also used a few Davenport 0-4-4T's.

Each line was built to suit the terrain and the construction methods used at each site. Fort Stevens had sand hills behind the sites for the gun emplacements so the track was built on trestles without steep grades. Fill and concrete were dumped directly from small four-wheeled wooden dump cars. Across the river at Fort Columbia the gun

Fort Stevens, Oregon, 1897. These trestles were built at the elevations shown so that trains on them would be at the right heights for dumping loads into previously constructed forms. Because of the unusual differences in height of the trestles, simple lift bridges such as the one shown had to be built to enable trains to pass through higher lines that crossed over lower lines. The train on the upper level consists of #5 (Baldwin c/n 11770 of 4-1891) followed by #3. The train of dump cars full of sand is headed for the parados where it will add its sand to the embankment behind the battery. (A parados is an embankment designed to protect a battery from fire from the rear.) The simple lift bridge shown could be easily modeled from strip wood. *Photo, courtesy Oregon Historical Society, negative #7650.*

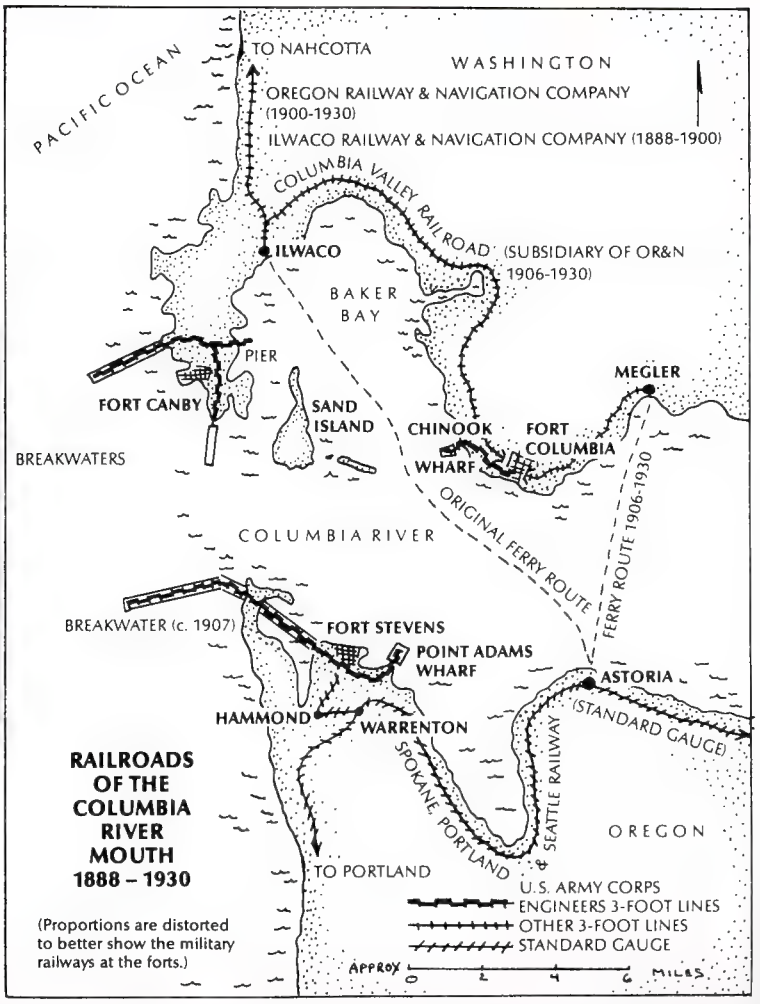


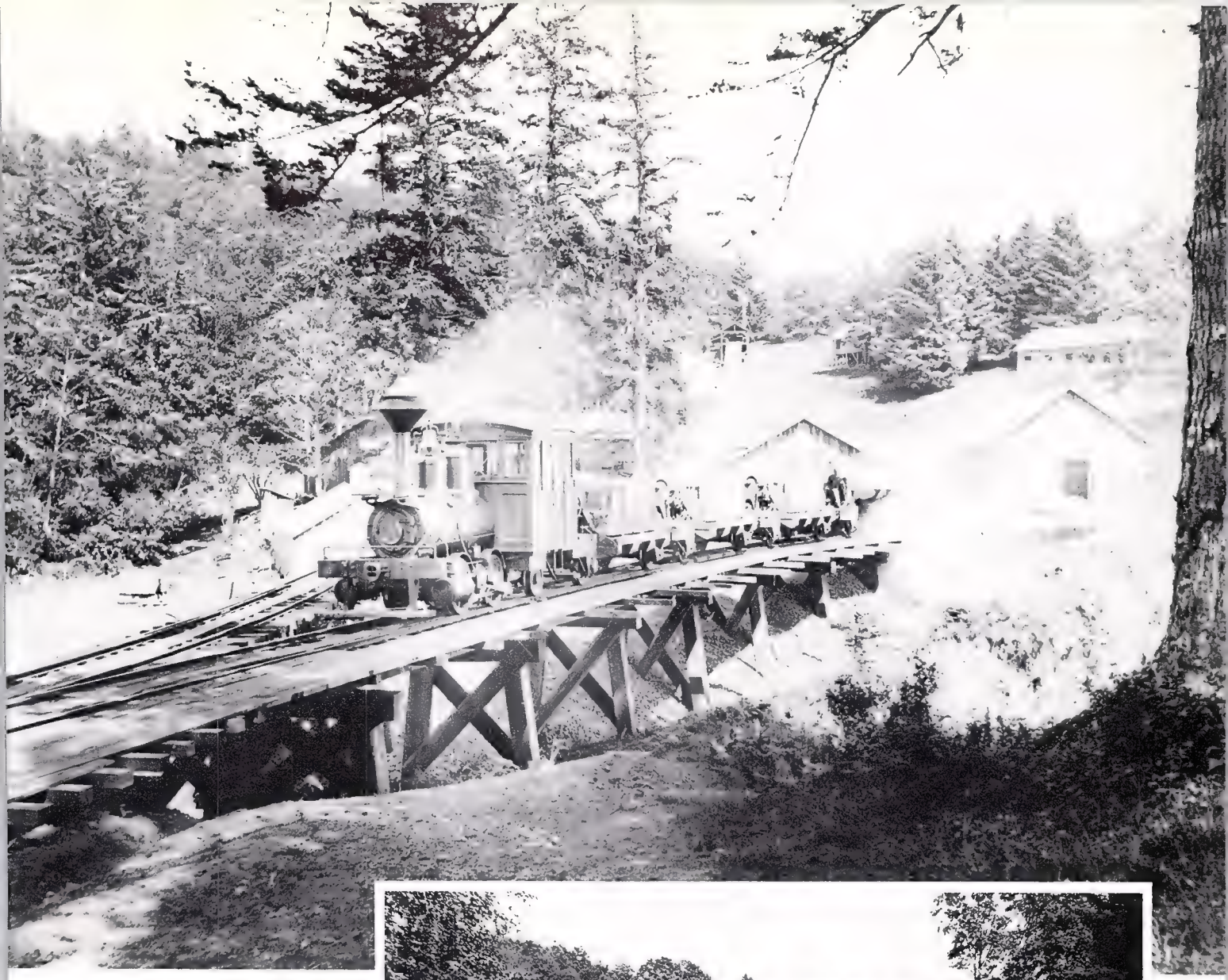
Port Adams Wharf, Fort Stevens, Oregon, May 14, 1897. This Baldwin was hoisted off the barge to the right with the derrick shown, but in the process the vertical leg of the derrick (with the round base plate) was torn loose from its moorings. Also note the turntables on the wharf. *Photo, courtesy Oregon Historical Society, negative #6487.*

Fort Stevens, Oregon, 1897. Locomotive #3 brings a load of concrete to forms being used to construct a room for the control board for cables from submarine mines laid at the mouth of the Columbia River. *Photo, courtesy Oregon Historical Society, negative #6489.*

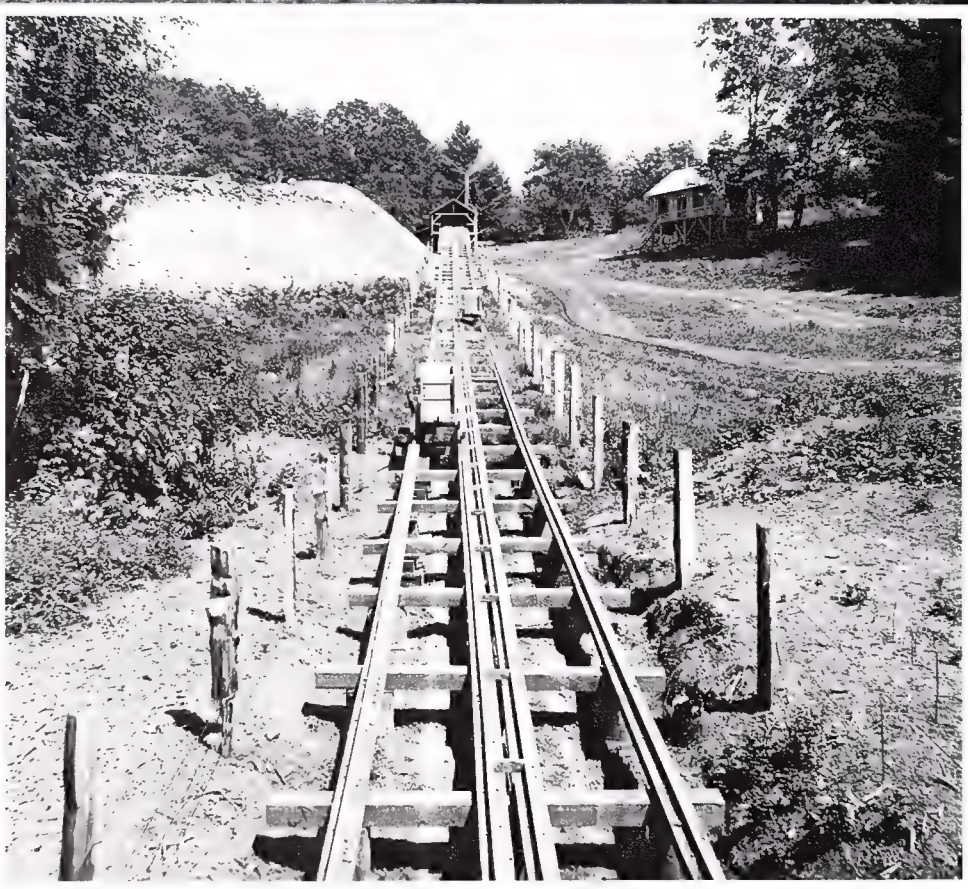
Fort Stevens, Oregon, 1897. These small four-wheel dump cars were loaded with sand by a steam shovel. Locomotive #4, supplied by Baldwin between 1885 and 1891, hauls the sand to a barrier being built at the back of one of the batteries. *Photo, courtesy Oregon Historical Society, negative #6580.*

Fort Stevens, Oregon, March 3, 1897. Sand is being dumped to form a parados. *Photo, courtesy Oregon Historical Society, negative #6479.*





Fort Columbia, Washington, April, 1897. The end of the line that ran from the wharf at Chinook on the Columbia River to Fort Columbia. A concrete-mixing plant is in the background. *Photo, courtesy Oregon Historical Society, negative #3998.*



Fort Columbia, Washington, 1897. This 2-foot, cable-powered incline was built to get concrete up to a gun battery emplacement on the top of a hill. These tiny cars were standard for concrete service. At the top of the hill where the incline ended, the cars were pushed by hand to the forms being filled. *Photo, courtesy Oregon Historical Society, negative #6513.*

Fort Columbia, Washington, July 21, 1897. Two more cable-powered inclines are under construction behind the 2-foot, cable-powered, concrete-hauling line in the foreground. *Photo, courtesy Oregon Historical Society, negative #6520.*

emplacements were located on a series of hills. A 3-foot line ran from a wharf at Chinook up a valley near the emplacement sites. Three cable-worked, 2-foot gauge inclines were built to carry concrete to the construction sites. The little cars used on these inclines were actually narrower than the track gauge. Separate 3-foot gauge inclines were built to haul the 35-ton gun barrels to their sites. These heavy loads were supported on 3-foot gauge trucks and hauled to the top of the inclines by steam winches.

Baldwin records show that the first four 0-4-2T's used on these lines were named at the factory but not numbered. At some time prior to 1897 the name plates were removed from these engines and they were numbered with a painted numeral on the headlight. These four engines had a star on the Baldwin plate on the front of the smokebox. The fifth and later engines were numbered at the Baldwin plant. There is no evidence to show that the Porter 0-4-0T's used on these lines were ever numbered.

All of the U. S. Corps of Army Engineers railroads were well built. Many railroads of the time, particularly those of the lumber companies, used raw poles for their trestles. Not the army engineers – they used *squared* timbers. The army corps also kept the locomotives and cars properly maintained and clean with nicely polished bells; after all, these were U.S. Army railroads. The construction railroads were maintained in the best "spit and polish" tradition of the army.

Once the construction of the forts and breakwaters was completed, most of the 3-foot lines were removed. A few sections of track were retained and used as supply railroads for the forts and gun emplacements they had helped build.

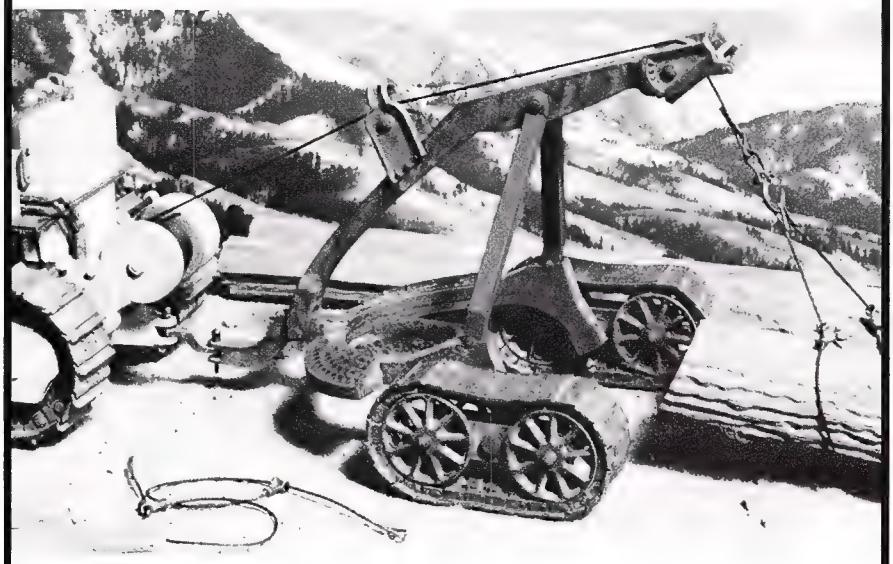
For further reading:

Fegans, Raymond. *The Railroad that Ran by the Tide.* Howell-North. Berkeley, California 1972. 146 pages.

Shaw, Frederick, Clement Fisher Jr., and George H. Harlan. *Oil Lamps and Iron Ponies.* Bay Books Limited, San Francisco. 1949. 187 pages. (Contains a long chapter on the Ilwaco Railway and Navigation Company.)

Small, Charles S. *Rails to Doomsday – The U. S. Army's Corregidor and Manila Bay Railroads.* Railroad Monographs, Greenwich, Connecticut. 1980. 70 pages plus supplement. Softbound.

"O" Scale "CAT" Accessories



Logging Winch
TR-401-$18.00

Logging Arch
TR-402-$48.00

Logs not included.

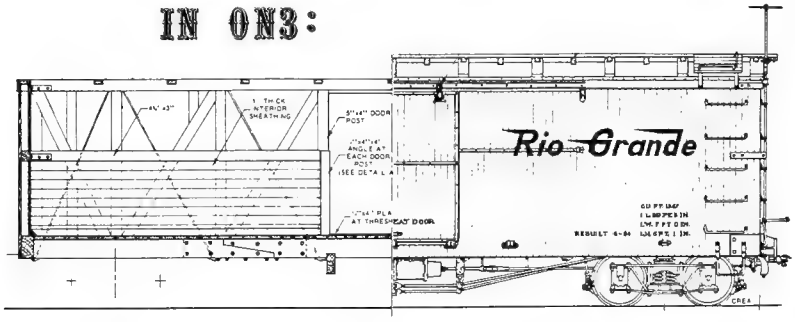
C.H.B. Models P.O. Box 93, Lakehurst, NJ 08733

TROUT CREEK ENGINEERING INC.,

IS NOW PRODUCING AND OFFER FOR IMMEDIATE SALE

TIMBER CREEK MODELS

IN ON3:



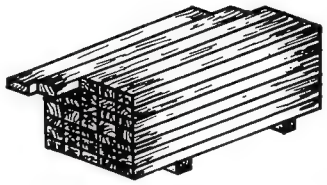
DON'T SETTLE FOR HALF A CAR!

WITH OUR #963 D&RG 30' BOX CAR KIT YOU'LL HAVE BOTH EXTERIOR AND INTERIOR FRAMING, BRACING, SHEATHING, WITH GRANDT, THINFILM, AND TROUT CREEK ENG. DETAILS. . . . . Less T/C, ONLY $31.95

See it at your dealer's, or order direct: (303) 371-8451

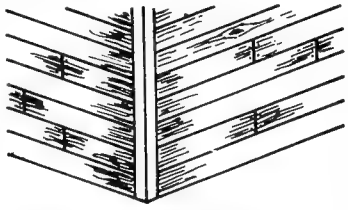
3700 No. HAVANA St. #214, DENVER COLORADO 80239

KAPPLER MILL & LUMBER CO.



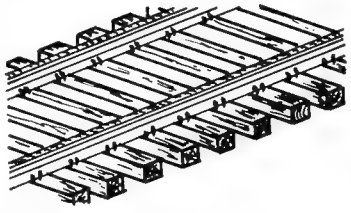
SCALE LUMBER & STRIPWOOD

Kappler Mill & Lumber Company is the choice of master craftsmen. We feature the most complete line of basswood scale lumber and stripwood available. Sizes range from 1" x 2"'s to 12" x 24" in O, S, HO and N scale and from .012" x 1/32" to 1/2" x 2" in stripwood.



BASSWOOD SIDING

Kappler basswood siding material is available in a wide range of sizes to fit the most demanding master craftsman's exacting standards for scratchbuilt structures or rolling stock projects. Scribed siding is available in 1/32" and 1/16" thicknesses and seven different board widths. Also available is HO scale beveled (clapboard) siding and scale board and batten siding.



TIES

For your track laying gangs, try Kappler Scale or Kontour ties, available in HO, S and O Scales in both standard and narrow gauges. Cross Ties for all scales come in two lengths for prototypical track appearance. We also have Switch and Bridge Ties for your complete track laying needs.

A Division of
THE J & M GROUP, INC.
1760 Monrovia, A-15
Costa Mesa, CA 92627

Building Yosemite Sugar Pine Lumber Company

CAMP 17

Part 1: The Base, Scenery, and Structures

by Jack Burgess

The prototype Camp 17 was a logging camp located just outside the western boundary of Yosemite National Park in California, not far from the Merced Grove of big trees. It was served by a branch of the Yosemite Lumber Company Railroad (later the Yosemite Sugar Pine Lumber Company Railroad). Special bulkhead cars (see July/August 1985 **GAZETTE**) carried logs from Camp 17 and neighboring camps down a 68-percent grade, 8300-foot incline to an interchange with the Yosemite Valley Railroad. Logging operations at Camp 17 continued from around 1907 to 1942.

The model Camp 17 is part of my HO gauge Yosemite Valley Railroad layout (November 1980 RAILROAD MODEL CRAFTSMAN). It is located at the top of an 8-foot-long working incline the top of which towers 83 inches above the floor of my layout room. From the top of the incline my trackage runs above a doorway and into Camp 17. Building Camp 17 proved to be both a fun and informative project. My goal was not only to recreate the various aspects of logging in the area as it looked in August, 1939; I also wanted to model Camp 17 as realistically as possible – and I wanted to include scenes showing the various logging techniques used on the prototype.

I spent a considerable amount of time researching Camp 17, making trips to the Bancroft Library at the University of California at Berkeley and several field trips to the area itself. I also did research into specific logging practices and had many informative conversations with Jim Law, a former employee of the Yosemite Sugar Pine Lumber Company.

The benchwork for Camp 17 is a basic open grid covered with ½-inch plywood under a layer of ½-inch Homosote. Each track level on Camp 17 is at a slightly different elevation.

The prototype Camp 17 on the Yosemite Sugar Pine Lumber Company Railroad showing the tent cabins described by the author. The stores building is on the right. *Photo, courtesy of the Bancroft Library, University of California.*

Opposite: The Camp 17 reload area. Here logs were transferred from flatcars to trucks to be taken to the mill. Notice how the realistic details and the subtle blending of colors. This color photo by the author won First Place Color at the 1985 PCR/NMRA Contest in Fresno, California.

Once the benchwork was complete I routed out the Homosote as necessary to install Kadee #308 under-the-tie uncoupling ramps. I have found that these ramps work extremely well. Two of my ramps were installed under turnouts. All the track was laid with code .070 rail on individual wood ties. The turnouts were scratch-built and are controlled by home-made switch machines using low amperage display motors. I did not use rail joiners between sections of rail; the metal rail joiners used on so many model railroads seem unrealistic to me. Each of my rail sections has its own wire feeder, soldered to the bottom of the rail so the wire does not show. With this system I don't need metal rail joiners to carry the electricity. Once the rail was laid, Grandt Line dummy plastic rail joiners were added at 39-foot intervals and the rail was airbrushed with oversprays of Floquil Rail Brown, Earth, and Great Northern Gray-Green.

I prefer old-fashioned screen wire as the base for my scenery. Screen wire allows me to control the shape of the contour of the land. Also, when I cover the screen wire with Hydrocal-soaked paper towels, the Hydrocal does not drip through the screen and create a mess.

I did not rush the initial shaping of my screen wire scenery base. Once the first layer of plaster was in place I took time to visualize the ultimate shape of the scenery I wanted and made appropriate changes. I faced some of the typical problems found in shaping scenery. Some of my terrain was really too steep. I had scenery adjacent to the track where I should have had a cut and not a natural slope. Steep areas adjacent to a track should, in general, be the result of cut and fill operations and not take advantage of a natural features in the landscape. Some of the sites in my camp seemed too flat and featureless. If you take time and be critical of your scenery as I did you'll probably find lots of things to fix at this stage. Are certain slopes so steep that no soil could survive erosion from even a mild rain shower? Does the scenery look like it was there before or like it was built to fit around the railroad? Many times these problems can be corrected with a little more plaster, but don't be afraid to take a hammer and bash contours into your scenery where you need them.

Most layouts have the scenery running upwards from the track level until it meets the backdrop. Doing this would have been a problem on Camp 17 because the layout was so high above the floor and so near the ceiling that very little room was left for properly scaled evergreen trees. My scenery rises only slightly above the base track level and then drops to the backdrop as shown in Figure 1. This approach not only allows trees close to the backdrop but gives the viewer the distinct impression of being on top of a mountain looking down into the background scene.

When scenery rises above the track to join the backdrop the joint of the backdrop defines the extent of the scenery. It is then difficult to convince the viewer that the scenery continues upward beyond the backdrop. When scenery drops away from the tracks, as in Figure 1, the joint between the three-dimensional scenery and the backdrop may be out of sight, making it easier to convince the viewer that the scenery goes beyond the backdrop. When the viewer cannot see down to the backdrop joint you don't have to try to hide it. If it is in sight it may still be easily hidden with trees and shrubs.

The overall effect of this unconventional approach to background scenery has been well received by modelers who have seen Camp 17. I used this method because I wanted to gain room for properly scaled tall

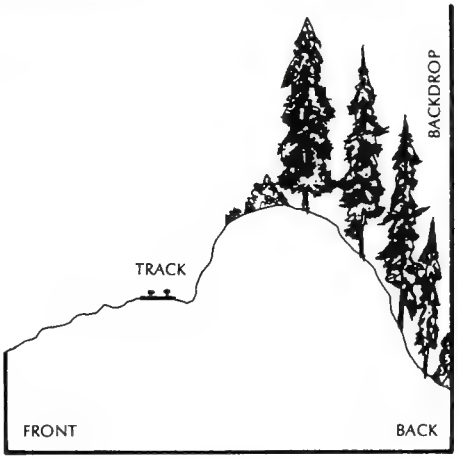
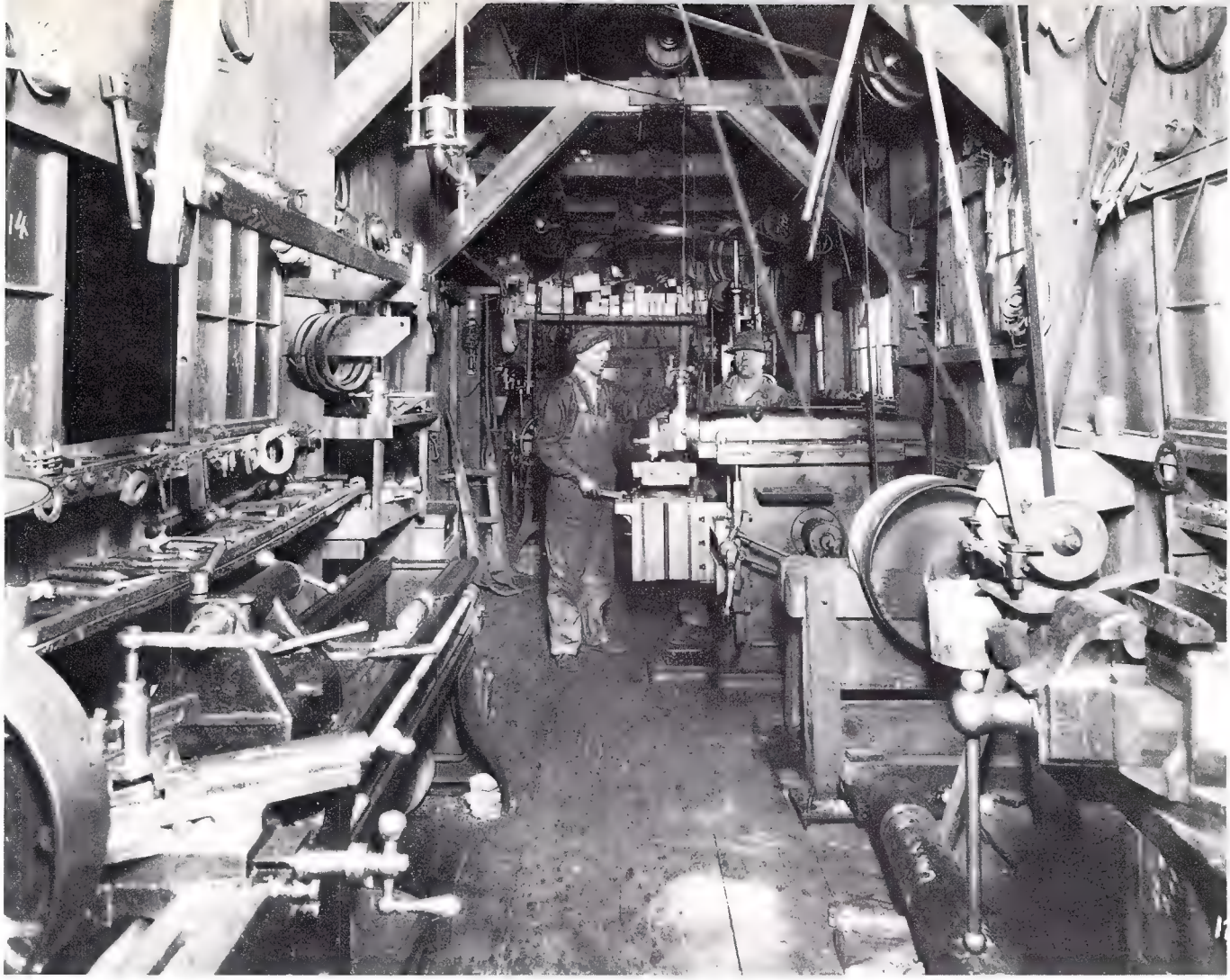


FIGURE 1.
CROSS SECTION OF CAMP 17

One of the many trees on the Camp 17 scene. This tree was built from a Scentare kit. *Photo by the author.*



This photo inspired the author to build the Camp 17 machine shop. His model is complete with machines and overhead belt drive. *Photo, courtesy of the Bancroft Library, University of California, Berkeley.*

trees on my scene but other modelers may want to try this idea to give the viewer the impression of being on a ridge looking down on their railroad.

My basic ground cover is sifted dirt from the real Camp 17 area bonded in place with diluted white glue. (I described my techniques for using natural soil materials in the April 1984 RAILROAD MODEL CRAFTSMAN.) After I had applied my first layer of dirt I realized that dirt alone would not create the appearance I wanted for Camp 17. The ground at the real Camp 17 is covered with branches, decaying vegetation, pine needles, pine cones, and leaves. So I mixed sifted dirt with some Life Like Earth, a basic ground cover that consists of dyed, finely ground sawdust. When mixed with real dirt and bonded in place it gave the "soil" a much more realistic look.

Once the basic scenery and ground cover were in place. I painted the backdrop a sky blue. Then railroad artist Bob Schlechter painted a background scene for me, using acrylic paints. One advantage of modeling an actual location is that the background scene can be painted from actual photos of the prototype. Persons familiar with the Camp 17 area will recognize the area when viewing the scene Bob has so skillfully painted on my backdrop.

In most parts of my scene I just sifted the dirt/sawdust ground cover over the plaster. However, the loose ground cover would not stay on very steep slopes or on the sides of cuts, so for them I mixed my "dirt" with diluted white glue to form a paste. I troweled this paste onto the steep slopes with a butter knife. Before the paste dried, I worked its surface over with an X-acto knife to make it look as realistic as possible. Frequently, roots are exposed during the construction of cuts. The exposed roots in my cuts are very fine dried roots from weeds inserted into the wet "dirt."

I made a special effort to duplicate the actual vegetation found around Camp 17 and modeled the actual species of plants such as green and mariposa manzanita, white thorn *Ceanothus*, red mountain heather, bush monkey flower, chamise, and sword ferns. Many times the difference between modeling an actual species of bush and using the more common generic model railroad bushes is only a matter of changing the color and form of the generic bushes. *Ceanothus* sp. and manzanita are probably the two most common shrubs in the Camp 17 area. I modeled both of these plants using Scentare foliage material. The local species of *Ceanothus* forms a thick, matted ground cover, so to model it the "bristle pad" Scentare foliage material was left unteased and spray-painted with a combination of flat white and flat gray. Then I added a light green foam from Architectural Scale Models Inc. for the leaves.

I used the same Scentare foliage material for the manzanita but teased it out into a more open branch structure and then spray-painted it with a red oxide color and added some blue-green foam rubber for leaves. Bush monkey flower was produced by teasing Bachmann polyester fiberfill material, spraying it with hair spray and dipping it in fine, yellow foam rubber. Sword ferns were made from brass etchings produced by Scale Link (a British firm). My red firs and sugar pine trees were built up from Scentare kits.

This period of scenery building was frustrating because it seemed that I was working continually trying to produce enough trees and bushes to adequately duplicate nature. At times, the foliage needs of a scene as small as Camp 17, (only 2 x 6 feet) seemed endless. However, my efforts were slowly rewarded as the density of my forests thickened.

There are very few authentic photos of Camp 17 from the 1939 era I am modeling. However, I have lots of information and

The Camp 17 stores building is across the track from the open-top water tank. *Photo by the author.*

These HO scale tent cabins are built in forced perspective and are actually smaller as they recede into the distance. The author sloped his terrain down toward the back of the scene to make room for the tall trees. *Photo by the author.*

photos from nearby camps. So while my camp may not be exactly like the real Camp 17, it is certainly typical of Yosemite Sugar Pine Logging Company operations of the period.

I scratch-built all the buildings in Camp 17 constructing the wood ones, board-by-board. Some have compete interior detail; for example, the saw filer's shack (January/February 1985 **GAZETTE**) and the machine shop. The machine shop was based on a photo from the Bancroft Library showing a shop that probably maintained donkey engines and skidders. It has a lathe and shaper, both driven from an overhead belt system. I have built it as a semi-permanent building on skids. There are two other semi-permanant buildings in Camp 17, a stores building, and a simple open-topped water tank – both based on photos taken in the Camp 17 area.

Bancroft Library photos show that seasonal tent cabins similar to those of the Curry Company in Yosemite National Park were used in the lumber camps for bunkhouses and mess halls. They consisted of wooden floors, short wooden walls, and canvas sides and roof. I was unable to find any suitable material to to model the duck canvas of the prototype in local yardage stores, so I used cloth from quality, very well-worn handkerchiefs. It was still too thick to allow me to hem the cut edges so I bonded the material to 1-ply Strathmore board, using a spray adhesive. Then I cut out the sections of the tent with a sharp razor blade, using lines drawn on the non-fabric face of the board as a guide. The tents were assembled using scrap strip wood for interior bracing. After the completed tent cabin structure was weathered with an airbrush, I added guy ropes made of airbrushed fishing monofilament leader material.

Because of the overall design of Camp 17, the tent cabins had to be located on a steep downward slope. This added several interesting elements to the scene. Prototype camps of necessity were often located on similar unbuildable terrain and construction costs were minimized by using simple piling or cribbing instead of extensive grading to produce a level tent site. I duplicated this feature using rough twigs as piling and cribbing and allowed the tent cabins to be cantilevered from the side of the hill. The paths and steps connecting the tents and the rest of the camp also make interesting details.

At the suggestion of Bob Schlecter, I constructed the tent cabins in a forced perspective so that each succeeding one is slightly smaller than its neighbor higher up on the hill. A pair of HO scale figures stands next to the first and second tent cabin, while an N scale figure stands in front of the last tent cabin. Many people have viewed this scene without realizing how I created the subtle forced perspective.

Near the tent cabins is a very simple stores building. Although it is prototypical it did not add much to the overall attractiveness of the camp until I figured out how to give it some interest by adding an associated loading platform and a pair of figures working on the platform. Several non-descript 30 and 55 gallon drums together with a pair of orange crates full of ripe oranges attract viewer's attention. The crates were constructed of scale stripwood, the end labels are photographic reproductions of actual orange crate labels and the oranges themselves are appropriately sized cake decoration "sprinkles."

In part 2 I will describe more of the structures and some of the special details that add life to Camp 17.

For further reading:

Johnson, Hank. *Railroads of the Yosemite Valley,* Johnston-Howe, Long Beach, CA 1963. 206 pages.

Johnson, Hank. *The Whistles Blow No More – Railroad Logging in the Sierra Nevada, 1874-1942.* Trans-Anglo, Glendale, California. 1984. 160 pages.

Coronado SCALE MODELS

Fast Mail Order Service is Our Specialty!!

1544 E. CYPRESS ST. PHOENIX, ARIZONA 85006

POSTAGE PAID 3rd CLASS or UPS--1st CLASS 10% Ph.602/254-9656

Postage Extra for Visa, Master Charge, American Express, and Phone Orders. Foreign Orders Welcomed!

GRANDT LINE PRODUCTS

3081	On3 RGS Powered Goose No. 6	179.50
3075	On2 SR&RL Archbar Truck	7.00
3082	On3 EBT Vulcan Truck	coming

TAURUS PRODUCTS

On3	20 ft. Wood Ore Car	16.95
Sn3	20 ft. Wood Ore Car	15.95
HOn3	20 ft. Wood Ore Car	2/ 13.95

PUFFING BILLY MODELS

HOn3/HOn30	Bellevue & Cascade Flatcar	7.95
HOn3/HOn30	B&C Stockcar Kit	13.95

LA BELLE WOODWORKING CO.

O-80	D&RGW Gas Motor Car Kit	coming
HOn3-20	D&RGW Open Platform Coach	12.75
HOn3-21	D&RGW Combine	12.75
HOn3-22	D&RGW Baggage Car	12.75
HOn3-23	D&RGW Postal Car	12.75
HOn3-24	D&RGW "ALAMOSA"	12.75
HOn3-25	D&RGW Closed Vest. Coach	12.75

MODEL DIE CASTING

HOn3	Class B, 2-Truck Shay Kit	40.00

TIMBER CREEK MODELS

On3	D&RGW 3000 series Boxcar Kit	31.95

WESTCO PRODUCTS

HOn3	White Metal 30 ft. Underframe	5.25
HOn30	White Metal 28 ft. Underframe	5.25

DETAIL ASSOCIATES (1/4" Scale)

5001	Blacksmith Anvil & Tool Set	3.50
5002	Carpenter Tool Set	3.50
5003	Roundhouse Machanics Tool Set	3.50
5004	Large 2-Wheel Handtruck	2.75
5005	Platform Scale	2.75
5006	Machinists Tool Set	3.50
5007	Blacksmith Hearth	2.00
5009	Lube Cans (4)	2.75
5010	Dummy Switch Ground Throws (2)	2.75
5011	Caboose Interior Detail Set	3.25
5013	Steam Loco Tool Set	3.25

EVERGREEN HILL DESIGNS

5013	O-On3 Branchline Water Tank	29.95
513	HO-HOn3 Branchline Tank	19.95

AMERICAN MODEL BUILDERS

101	HO Jaw Crusher Kit	10.95
102	HO Ten Stamp Kit	34.95

SIMPSON PRODUCTS (On3)

553	Corrugated .002 brass(2x4") 10/	12.50
554	Corrugated .001 steel (2x4") 10/	12.50
109	Corrugated Paper	2.95

C.H.B. MODELS (1/4" Scale)

TR-400	"Caterpillar" D-8 Tractor Kit	69.50
CS-19	Log Chocker & Shackled Hook	1.50
TR-401	Logging Winch for D-8 Cat	18.00
TR-402	Logging Arch for D-8 Cat	48.00

BUILDERS IN SCALE

HO	Weiry & Son Drilling Co.	49.95
HOn3	C&S Jefferson Station	38.95
HOn3	C&S Water Tank	34.95
HOn3	Pump & Boiler House	16.95

PIKESTUFF

HO	Service Garage-Machine Shop	14.95

1986 CALENDARS

Sundance	Rocky Mt. Railroad (color)	7.00
Yorke	Light & Industrial RR (B&W)	4.85

BOOKS

"Steel Rails & Silver Dreams"	35.95
"Donner Pass"	47.95
"Little, Old & Slow" (Peach Bottom)	6.00
"Railroads In Mexico, Vol. I"	39.00
"Going Railroading" (C&S)	34.95
"Steinbeck County Narrow Gauge"	29.95
"Narrow Gauge In Ohio"	29.95
"Milwaukee Road Narrow Gauge"	29.95
"Vermont's Granite Railroads"	34.95

"Your one-stop source for Narrow Gauge supplies"

sas

A ½-INCH SCALE 18-INCH GAUGE "PORTER"

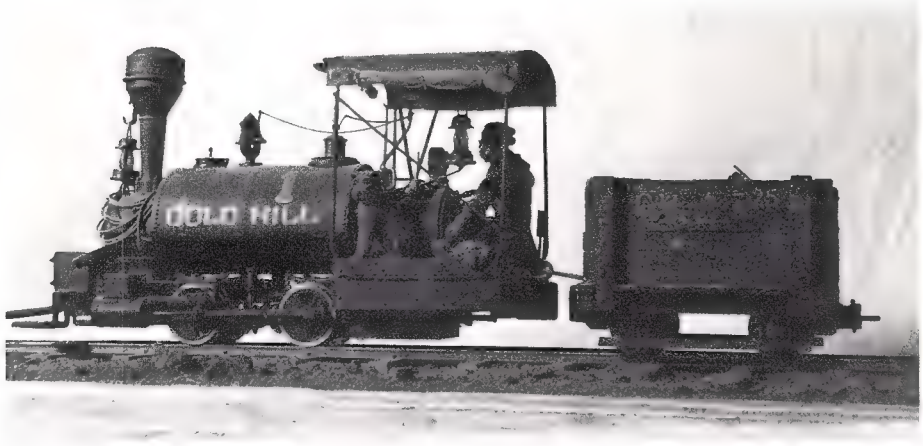
by Randall Sauter

My ½-inch scale, 18-inch gauge "Porter" was started back in May, 1981, when the First Annual **GAZETTE/GRANDT LINE** Porter 0-4-0 Locobashing Contest was announced. I missed the deadline, but when I read the **GAZETTE** issue with the winners' names (January/February 1982) I discovered an article by Scott Zieske that included information on the locomotive I was "bashing," The J.B. HAGGIN. Scott's excellent article got me going again, and finally it's done. Just consider this article a very late finish in the 1981 Porter contest.

The J.B. HAGGIN ran at the Homestake Mining Company in Lead, South Dakota. The prototype locomotive was one of several little 22-inch gauge engines built by Baldwin that ran in and around the gold mines of the Homestake Mining Company. So my engine is really not a Porter because it was based on a Baldwin engine, but (as specified in the contest rules) it uses On3 Porter parts from Grandt Line. I also took some liberties with the gauge and made it 18-inch gauge instead of 22-inch.

A Grandt Line On3 Porter tank engine kit was the basis for my conversion. The frame, cylinders, rods, drivers, motor, and gears are stock Grandt Line parts. I added a

The small size of the prototype of this model is apparent when you compare the size of the engineer with the engine. The lantern used as a headlight works and has constant lighting. *Photo by Randall Sauter.*



There is even room for the engineer's dog in the cab of the author's ½-inch scale, 18-inch gauge locomotive. The rope on the smokebox and the rolled-up curtains on the cab give this engine a "lived-in" look. *Photo by Randall Sauter.*

This builder's photo of the J. B. HAGGIN was taken at the Baldwin Locomotive Works in Philadelphia in 1879. *Photo, collection of H. L. Broadbelt.*

A simple but effective coupler links the author's engine and its tender, a converted ore car and the engine. The wheels and journals on the tender are from Grandt Line. *Photo by Randall Sauter.*

wood and brass pilot and extended the rear frame a bit. The boiler is from the Grandt Line kit, but I built up a correct flat smokebox front and added a sliding cleanout door. The saddle tank is also from the kit, but I added a brass wrapper over the plastic tank. I rolled the lower edges of the tank under, as in the the prototype.

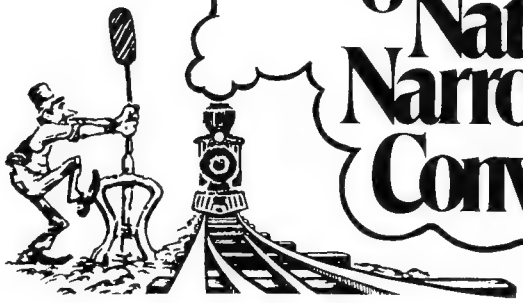
I cut apart a ½-inch scale engineer and mounted him in position, along with his dog. All this white metal made the rear end of the locomotive so heavy I had to fill the boiler and smokestack with lead shot to bring the front end down. But that was not enough so I made the front buffer block from lead, which did the trick.

The engine is very heavy for its small size but I have had no problems with the plastic frame wearing. The model runs very well with the Grandt Line drive and can motor.

The lanterns hanging in the cab and on the stack are scratch-built. A piece of soft clear plastic tubing was placed over a small light bulb—this made the tubing bulge like a lantern globe. Then the rest of the lantern was constructed around the globe. The lanterns work and have constant lighting.

My tender is a converted ore car, built up board-by-board with Grandt Line wheels and journals. The boards were removed from the front end of the car and a shelf was added to carry tools.

I really enjoyed building this little engine in a large scale. By choosing such a small prototype I can run large-scale models in a very small space. Why don't you give it a try?



6th National Narrow Gauge Convention

DENVER, COLORADO
1986

WHEN: September 17, 18, 19, 20 & 21, 1986 — Wednesday through Sunday
Registration begins 10:00 a.m. Wednesday. Convention activities begin at 1:00 p.m. Wednesday.

WHAT: **Manufacturers** (as of November 10th)—WB Video Productions, Trains of Texas, Crummy Products, Overland Models, Caboose Hobbies, Rio Grande Models, Heimburger House Publishing, Builders In Scale, Carson & Colorado RR Co., Caboose Stop Hobbies, Tom Klinger RR Photographs, Switchmaster, Cibolo Crossing, Railhead Publications, New Century Enterprises, V&T Shops, Trackside Details, Mike Kotowski RR Art, Patricia Lerners RR Art, and Hungry Horse Trading Co.
Clinics (as of November 10th)—Darlene Edgerton: *Changes, Changes—Clear Creek Canyon from Golden to the Forks;* Bob Richardson: *Operations at Alamosa & Westward on the D&RGW NG;* Joe Crea: *Whether or not to Weather;* Mel McFarland: *Railroads in the Cripple Creek District;* Marc Horovitz: *Introduction to Garden Railways in Narrow Gauge;* Ken Hampton: *A Visit to the National Historic District of Crested Butte;* Don Heimburger: *Great Sn3 Layouts and Models;* and Bob Stull: *Milling Around.*
Layouts (as of November 10th)—Bill Gould: *RGS, HOn3;* Bill White: *D&RGW, HOn3;* John Robinson: *Empire Mining CO. RR, On3 & On2;* Don Meeker: *C&S On3;* Jim Schwingle: *D&RGW, HOn3;* Jim Trowbridge: *Colorado Midland/ Colorado & Western, HO & HOn3;* Mike Trent: *C&S, On3;* and Mike Horner/Steve Swanson: *D&RGW/C&S/RGS, HOn3.*
Prototype Steamups—Colorado Railroad Museum, High Country Railroad and Special Excursion on the Cumbres & Toltec Scenic RR.
Other Activities—Modular Displays, popular vote model contest, popular vote photo contest (information to be sent with registration packet), hobby shops and live auction with Special Guest Auctioneer, *Charlie Getz* of the *Narrow Gauge & Short Line Gazette* (with optional minimum bid, no buy-back fee and no commission charge).

COST: Pre-registration (before 8/1/86) $50.00, Registration (after 8/1/86) $65.00
One-day Registration $30.00 NO REFUNDS AFTER SEPTEMBER 1, 1986!

Manufacturers' Display information packet available upon request.

Special Pre-registration Offer: First 100 pre-registrants will receive a **FREE engraved metal commemorative 6th National Narrow Gauge Convention Pass.** None will be available for purchase.

HOTEL ACCOMMODATIONS:
Reservations must be made directly with:
Airport Hilton Inn Denver
Narrow Gauge Convention
I-70 at Peoria
Denver, CO 80239
(303) 373-5730

RATES:

Single	$48.00
Twin or Double	$52.00
Rollaway	$10.00
Extra person in same room	$10.00

Submit names of all other persons sharing same accommodations.

The group room block will be held until two weeks prior to arrival. After that date, all rooms are on a space available basis. Advance payment is necessary to hold room past 6 p.m. on the date of arrival.

Registration

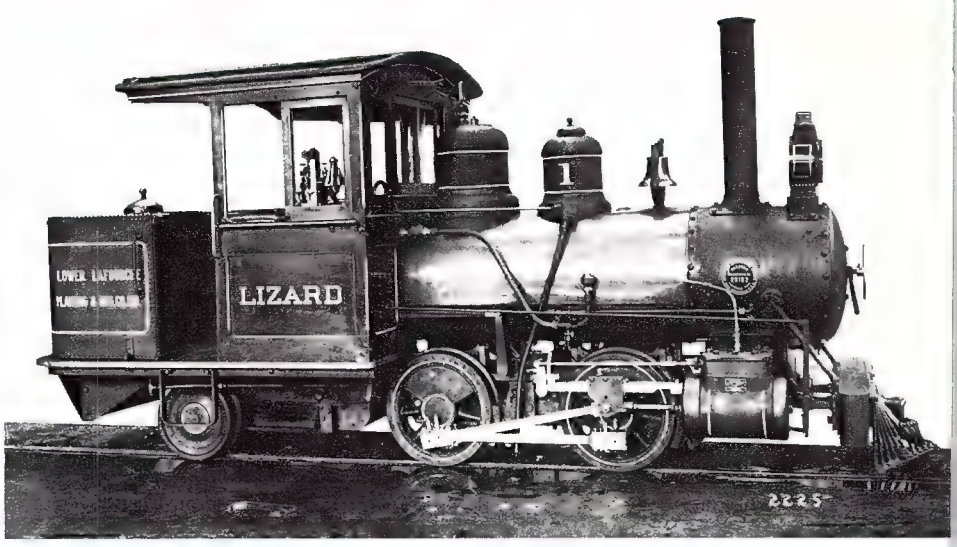
REGISTRAR: 6th National Narrow Gauge Convention
14541 East Harvard
Aurora, Colorado 80014

Name(s) _____
Address _____
City _____ State _____ Zip _____
Amount Enclosed $_____ Phone _____

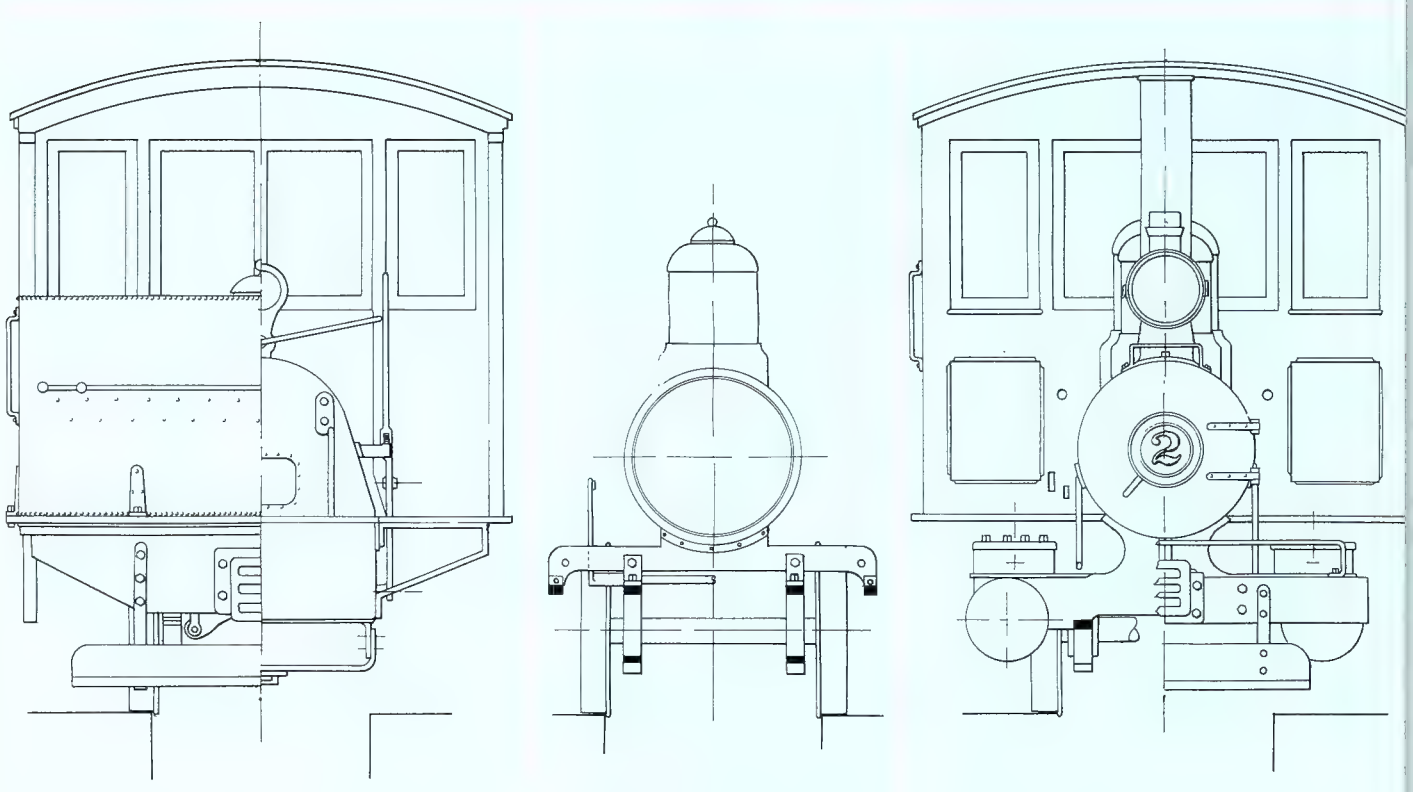
BALDWIN PLANTATION LOCOMOTIVE

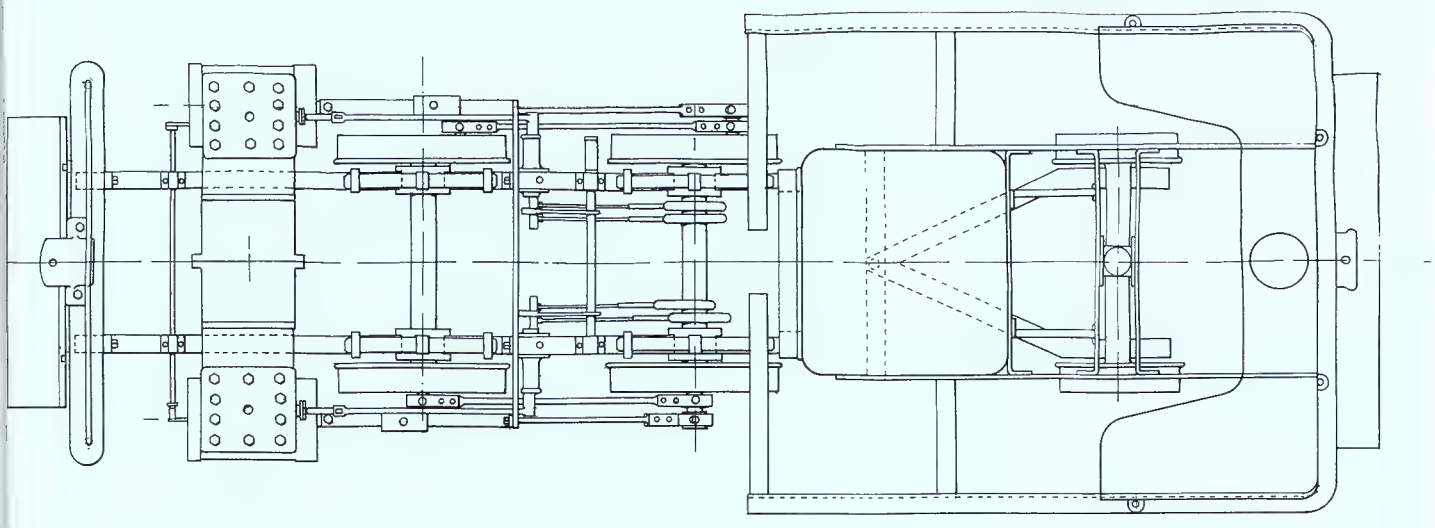
by Ed Gebhardt

The 1915 Baldwin Catalogue classifies this little engine as a class 6-10-⅓C with 8-by 12-inch cylinders, 28-inch diameter drivers, a 3-foot, 9-inch driver wheelbase, and a 9-foot, 7-inch total wheelbase. The catalogue further states that these locomotives were built in either 3-foot or meter gauge. This type of engine could be found in fairly large numbers in the sugar cane country of Louisiana. Many of these locomotives were also exported to Hawaii and to other sugar cane growing regions of the world.

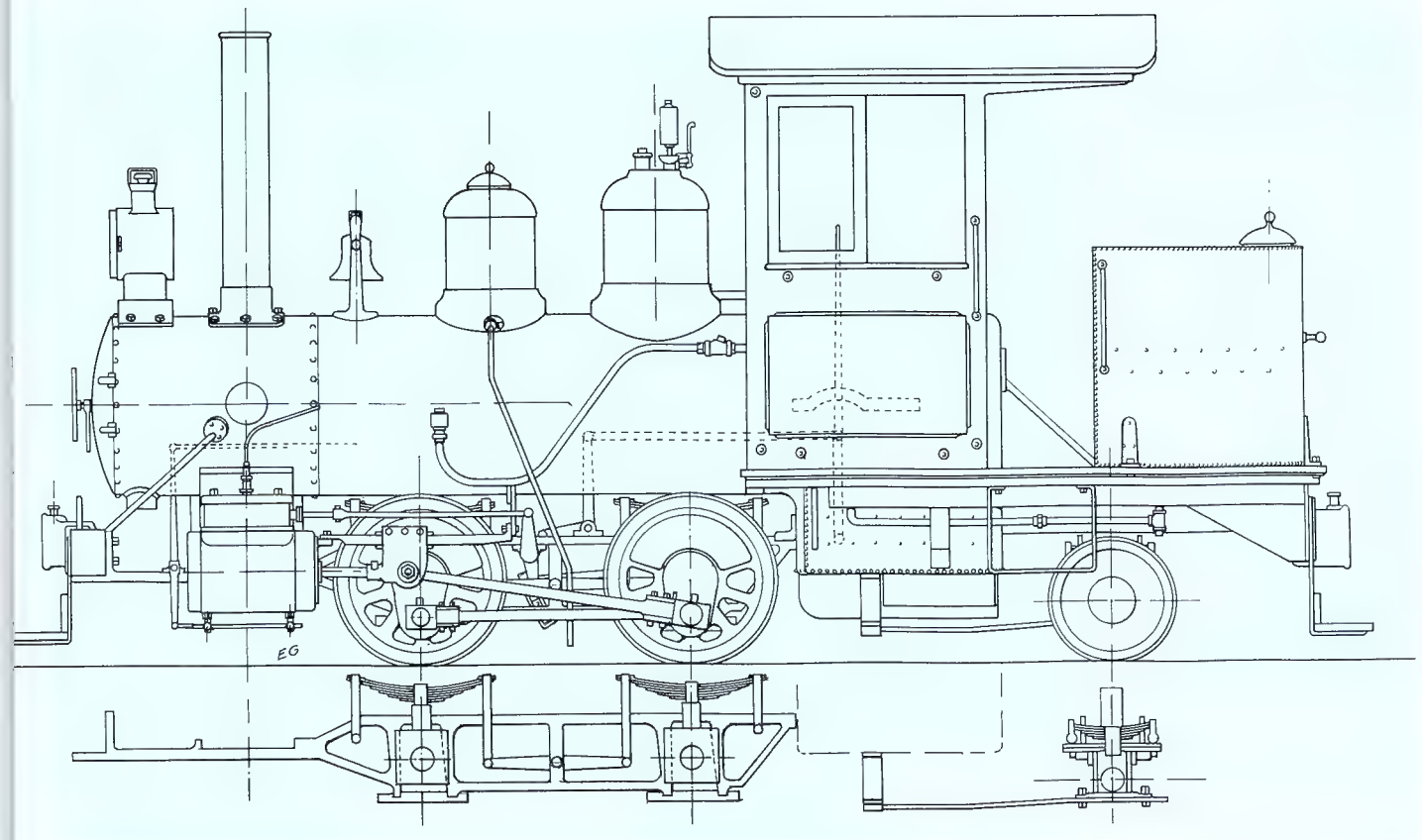


This locomotive is similiar to the one shown in the plan. It was built for the Lower Lafourche Planting and Manufacturing Company, operators of a sugar cane plantation near Houma, Louisiana. *Photo, collection of H. L. Broadbelt.*





SCALE: ⅜ INCH = 1 FOOT



ORE PROCESSING

Keevan Burnside

A MODELER'S PERSPECTIVE

PART 11: MODELING THE GRAVITY STAMPS

by John Hitzeman
Photos by the author

In this installment I will describe the assembly of my HO scale ten-stamp kit. You may want to refer back to Part 8 of this series in the July/August 1985 **GAZETTE** which has a description of (and diagrams for) prototype stamps.

The ten-stamp kit is one of several kits that I am in the process of making for the machinery described in this series. I am marketing these kits through my company, American Model Builders, Inc. So far I have produced an HO jaw crusher and an HO ten-stamp gravity assembly.

However, if you aren't in HO, don't despair; for those of you working in O scale, C.H.B. Models produced an O scale ten-stamp gravity stamp several years ago and I understand that some of these are still available from Coronado Scale Models. American Models Builders will have the ten-stamp available in S scale soon. By the way, C.H.B. also produced an O scale crusher kit.

The following photos and their captions include some helpful highlights and details which should help you assemble your stamp regardless of which scale you are building it in. Basically, I followed the instructions that come with the American Model Builders kit and was gratified to find that they seemed to work.

Remember that you must fit the bins and machinery to your mill as you build it. Prototype mills varied from mill to mill depending on terrain, types of ore, numbers of bins and stamps etc. Model mills may vary even more.

In the next part of this series, I will describe building the chutes and additional equipment connections for an ore-processing mill.

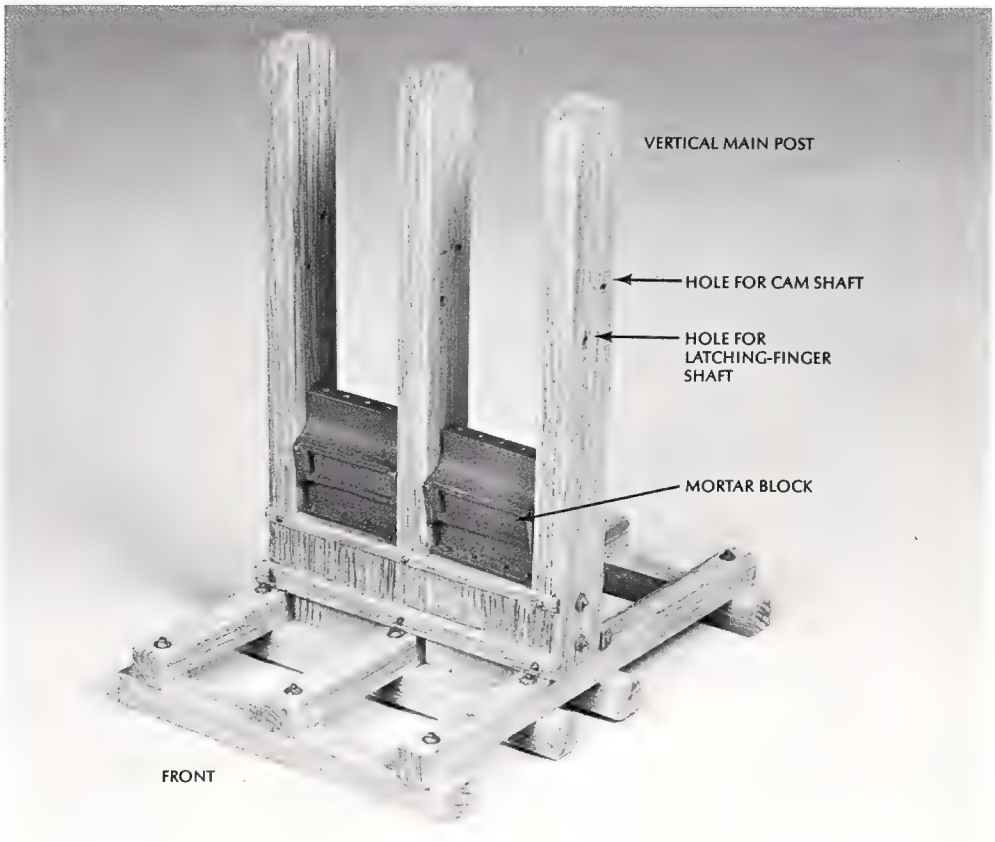


Photo 1. I assembled and weathered the wood for my gravity stamps as described in the kit's instructions. The wood grain was added with a #11 X-acto blade and the wood was weathered with Floquil Driftwood and Walnut stain. The nut/bolt/washer castings were pre-painted before they were installed on the wood parts. I colored the white metal mortar blocks with Floquil Rust and Weathered Black and fitted them in place. I drilled the hole for the latching-finger shaft to the front of the vertical main posts and the hole for the camshaft to the back of the verticle main posts because my maintenance platform is on the front of my stamps and my engineers will need to reach the latching fingers when stopping the stamps.

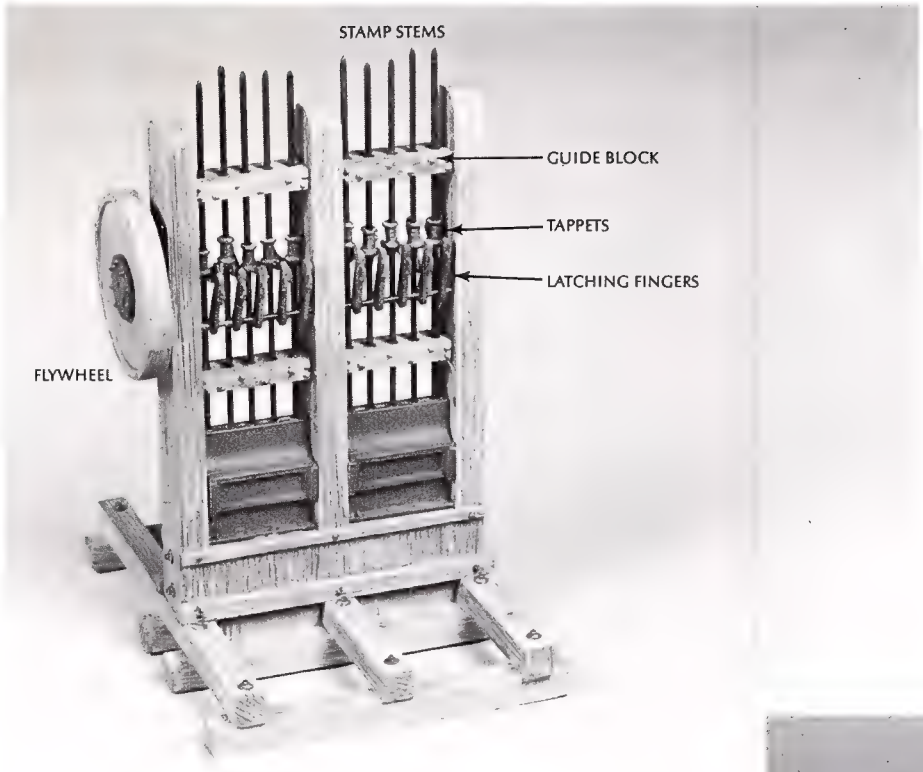


Photo 2. The latching fingers, cams, drive wheel, and guide blocks were installed in the wood frame. Note that the brass wire stamp stems have been tapered on their tops just as they were on the prototype. I colored the stamp stems and the various shafts with Blacken-It in advance of assembly because these parts actually move (This is a working model.) and paint would have gummed them up. The guide blocks are white metal castings with the holes cast in place. However, you will need to drill out the tappets before you attach them to the stamp stems. Note the latching fingers in place on the front of the stamp assembly. When you rotate the big flywheel which attachs to the main cam shaft, the tappets are driven up and down by the cams (shown below in the back view).

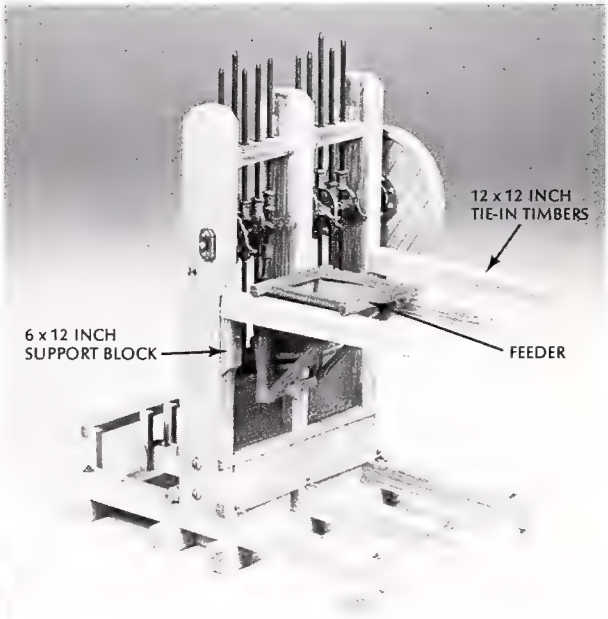


Photo 3. The back of the ten-stamp gravity stamp. The 12 x 12-inch bin tie-in timbers are supported by 6 x 12-inch timbers bolted to the vertical posts. When you get to this step you need to make sure that the tie-in timbers are long enough to reach the ore bins behind the stamp in your mill, but not so long as to make the slope angle of the bin chutes too shallow. On my model the tie-in posts are 9 feet 6 inches long. These tie-in posts also act as support beams for the feeders. An American Model Builders feeder (kit available soon) is in position in this photo.

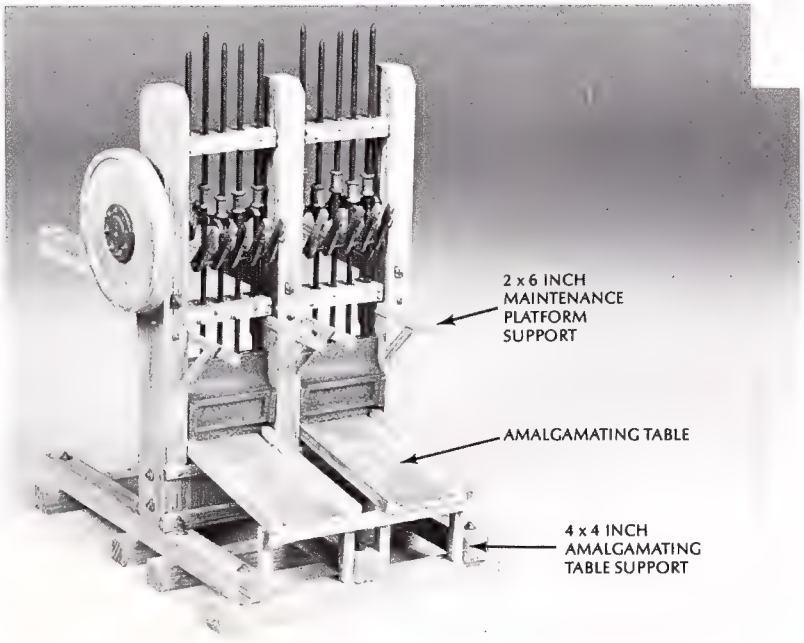


Photo 4. The amalgamating tables and their 4 x 4-inch timber supports have been attached in this photo. The 2 x 6-inch frames for the maintenance platform show just below the lower guide blocks. The distance between the top of the platform deck and the latching finger handles needs to be no greater than four or five scale feet so the workers can reach the handles easily when standing on the platform. The maintenance platform decking has not yet been installed because it would have interfered with installing the piping and drive systems.

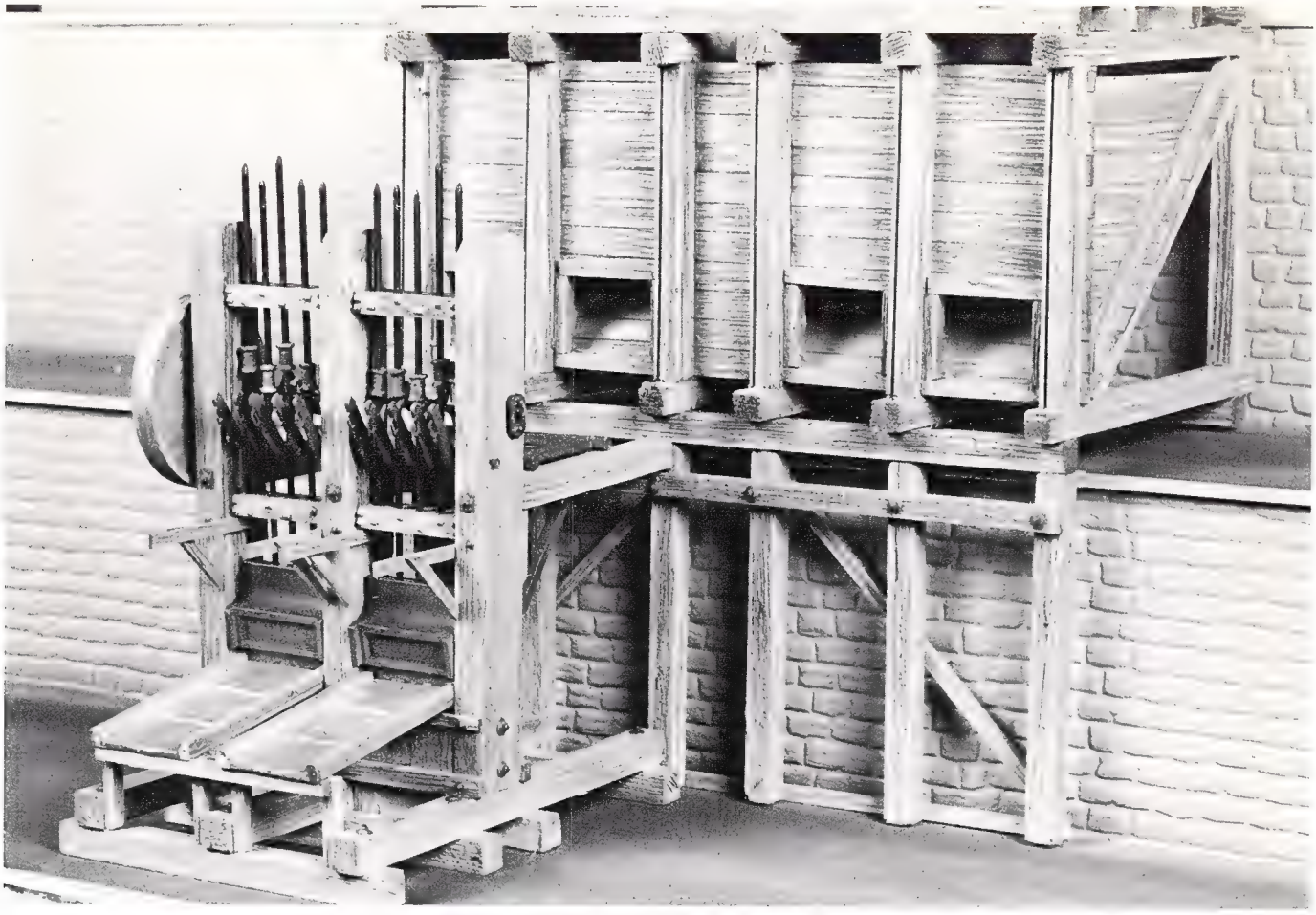


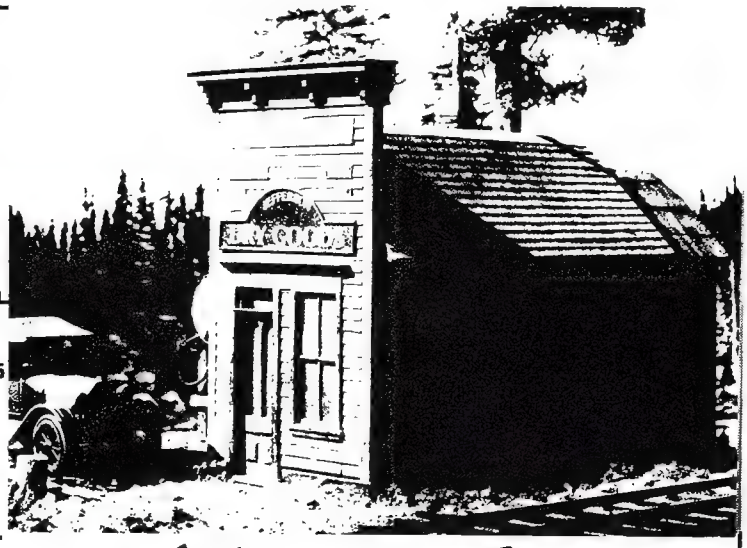
Photo 5. Here is the completed gravity stamp assembly in place in front of the secondary bins. These bins were described in the May/June 1985 **GAZETTE**. Note the 4 x 12 beam bolted to the bin supports so the bin tie-in timbers have a resting place. The location of this timber will vary and needs to be fitted into your own stamp assembly.

NOW IN "O" SCALE!

JEFFERSON
DRY GOODS

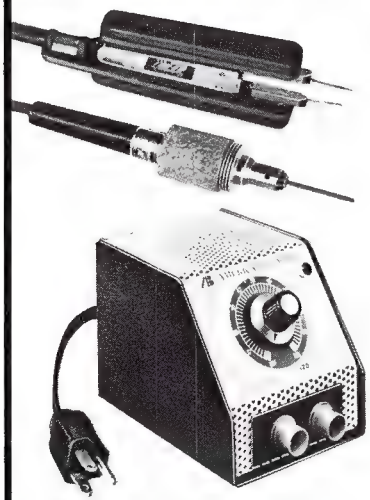
INSPIRED BY JOE CREA'S BEAUTIFUL AWARD WINNING STRUCTURE FEATURED IN THE SEPT/OCT 1985 GAZETTE, OUR VERSION CONSISTS OF HIGHLY DETAILED URATHANE CASTINGS, KAPPLER WOOD, AND GRANDT LINE WINDOW AND DOOR. COMPLETE INSTRUCTIONS AND COLOR PHOTO INCLUDED.

$39.95 + $2.00 SHIPPING



Arkansas Valley
Scale Models
2105 Wolfe Lane, Fort Smith, AR 72901

When it's important, you need the best . . .
American Beauty 'PRO' Resistance Soldering Equipment!



American Beauty 'PRO' Outfit 0-100 watts
Comes with: #10512 Ground Clip, #10519 Foot Switch, #10541 Tweezers, #10572 Probe, #105-A3 Power Supply.
$199 cash, **$207** credit card, ppd.

American Beauty 'SUPER PRO' Outfit 0-250 watts
The heavy-duty unit for HO or O scale. Same tools above & #105-A12 Power Supply.
$239 cash, **$249** credit card, ppd.

The heavy-duty #10573 Probe (HO or O) may be substituted at no extra cost.

The heavy-duty #105127 Tweezers may be substituted for $39 cash, $41 credit card.

VISA and MasterCard accepted.
Send $1.00 for catalog and Price List.

BOB BRASS
P.O. Box 884
Baltimore, MD 21203

MISERY WHIPS

Western prototype crosscut saws with 4 cutting teeth, etched in brass, plated in realistic silver. 5 saws per package - 1 each; 6', 7', 8', 9', 10'.

H1	HO scale crosscut saws	$3
S1	S scale crosscut saws	$4
O1	O scale crosscut saws	$5

Please include $1 per order postage & handling.
SSAE for a completed illustrated list of our products.

WAHKEENA
IRON WORKS
P.O. BOX 293
GRESHAM, OR 97030

14 Full Color
RAILROAD VIEWS $7

RAILROADS IN MEXICO
BY FRANCISCO GARMA FRANCO
315 B&W PHOTOS
30 FULL COLOR
224 PAGES
$39.00

SUNDANCE PUBLICATIONS Limited
250 Broadway Denver, Colorado 80203

DES PLAINES HOBBIES

PROBABLY THE BEST LITTLE
▶ NARROW GAUGE ◀
HOBBY SHOP IN CHICAGOLAND

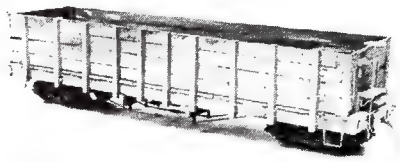
OPEN 7 DAYS A WEEK
HO — HOn3 — N — O — On3 — S — Sn3
1464 Lee Street, Des Plaines, IL 60018
Phone: (312) 297-2118

HU-MINI
O Scale Figures

Send a Stamped Self Addressed Envelope for Illustrated List.
Scale Railway Equipment Company
2010 Elkins Dr. St.Louis Mo.63136

for the
SERIOUS SCRATCH BUILDER

On3 Generic Freightcars . . .



#100	30' Flatcar	$20.95
#101	Low Side gon ...	$22.95
#102	High Side Gon ..	$24.95
#103	30' Boxcar	$31.95
#104	30' Reefer	$30.95

All kits are available less trucks
Duduct $6.00 per kit.

Contact any of these fine Dealers of write direct

WEST COAST

Franciscan Hobbies	S.F., CA
Peninsula Hobbies	San Mateo, CA
Whistlestop	Pasadena, CA
Red Caboose	Merced, CA
Iron Horse Hobbies	Brea, CA
South Bay RR	Redondo Beach, CA

MOUNTAIN STATES

Arizona Trains	Tuscon, AZ
The Back Shop	Sedona, AZ
Abajo Depot	Albuquerque, NM
Caboose Hobbies	Denver, CO
AA Hobbies	Ft. Collins, CO

MIDWEST

Desplaines Hobbies	Desplaines, IL
Rails Unlimited	Hanover Pk., IL
J&M Trains	Maumee, OH
Tinkertown	St. Louis, MO
Chandlers	Holliday, MO
Finestkind Mdls	Overland Pk., KS
Scale Model Supply	St. Paul, MN

EAST COAST

Audubon Rwy Supply	Audubon, PA
Blochs Hobby Shop	Allentown, PA
Adirondack Hobby	Schnectady, NY
MLC-The Train People	Uncasville, CT
Hobby Gallery	Wolcott, CT
Depot Hobby	Lantana, FL

AUSTRALIA

Narrow Guage Mod.	Middle Pk. Vict.

CANADA

Trains & Such	Calgary, Alb.

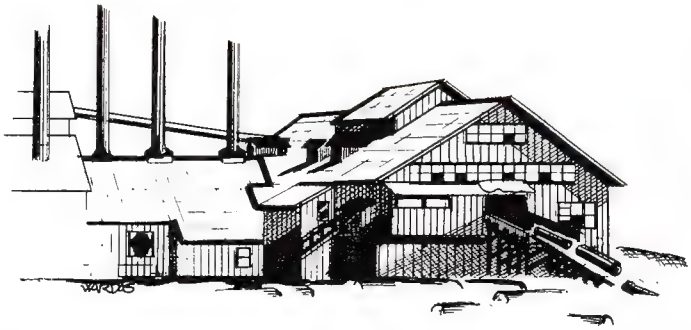
Kits are undecorated and less couplers
Add $1.00 to credit card orders for handling. Postage paid on direct retail orders.

Russian river Railroad Company
3515 Palomino Drive, Arlington, TX 76017
(817) 465-8308

VISA MasterCard

DEALER INQUIRIES INVITED

THE SAWMILL CHRONICLES



Part 10: The Boiler

by Reg Shaffer
Photos by the author

The C.H.B. Models Boiler (kit SB-850) looks like a 40- to 50-ton locomotive boiler. The assembled boiler will be mounted in a separate boiler house away from my sawmill. Although the steam and exhaust pipes which will run between the boiler house and the sawmill are included in the C.H.B. Boiler kit, I will wait and discuss them in the installment on building my boiler house.

I colored the parts of my entire Boiler with Hobby Black before assembly. Aside from a couple of difficult steps, the Boiler was actually a very easy kit to assemble. I used a piece of plate glass as a foundation for the assembly. This made it easy to make sure that everything came out nice and flat. Hot Stuff was used for assembly, supplemented with Hot Shot accelerator on some of the smaller parts.

Make sure you glue on all the detail parts to the back head (Photo 1) before you glue the back head to the fire box. Some of these parts are extremely tiny and will need careful attention. I had the most difficulty with those of the water glass assembly.

Trying to assemble the gauge cocks, gauge guards, and the water glass together so that the pins lined up with the holes in the back head was extremely tedious. I gave up and assembled the entire water glass unit separately from the back head (fig. 1) and then installed it. Be very careful when you trim off the flash on the gauge cocks. I almost cut off the gauge guard shoulders thinking they were flash. These cocks are so small they were almost impossible to hold for drilling. I finally got a grip

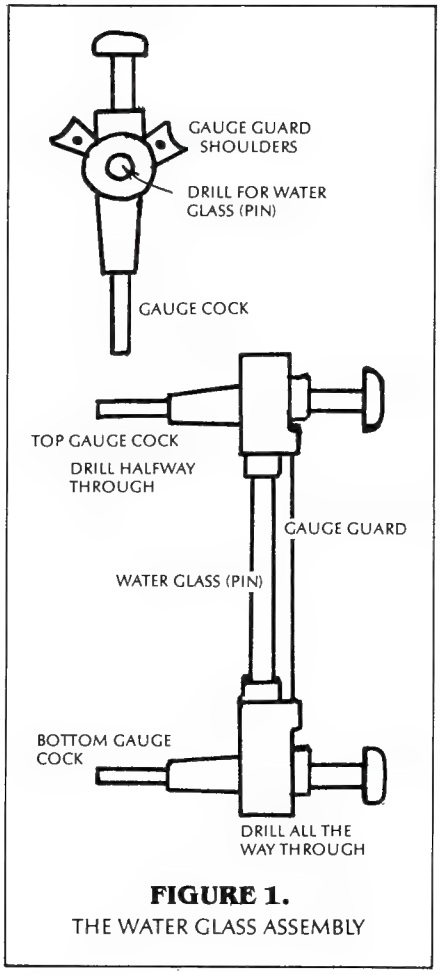


FIGURE 1.
THE WATER GLASS ASSEMBLY

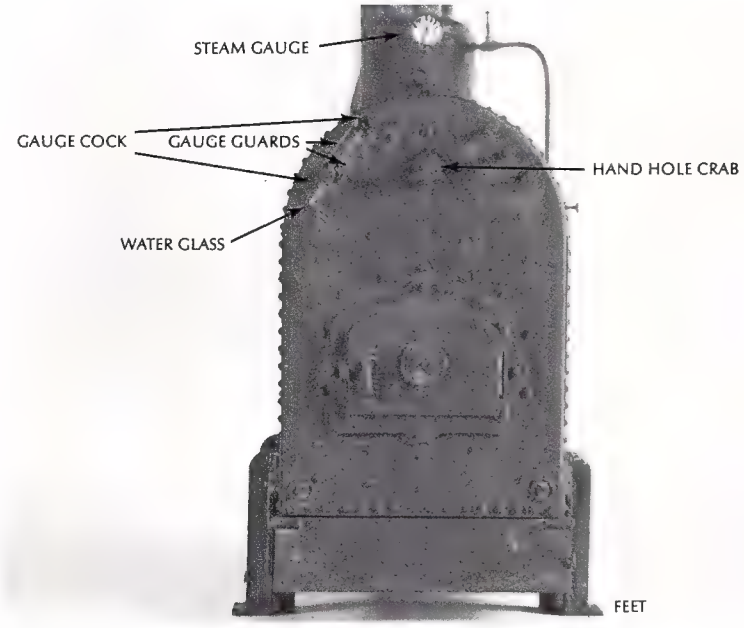
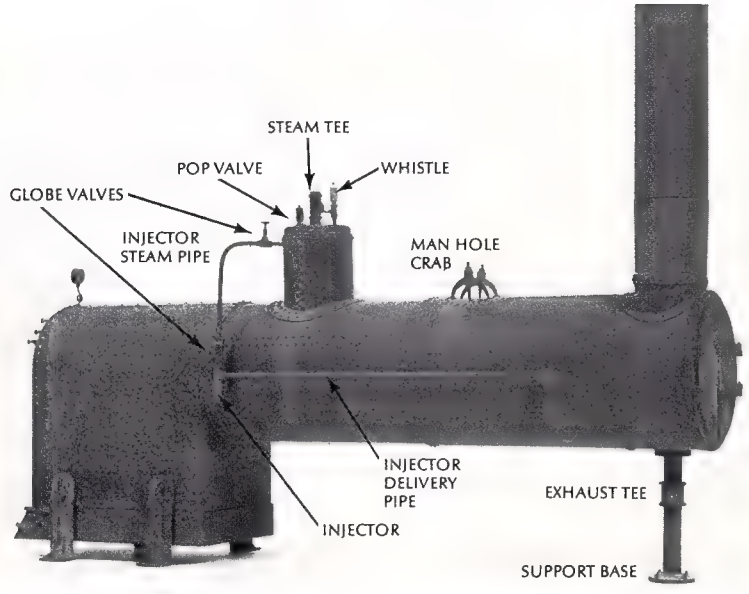


Photo 1. The back head of the completed C.H.B. Boiler kit showing the steam gauge, water glass, and other details.

Photo 2. The completed Boiler showing the location of many of the details.



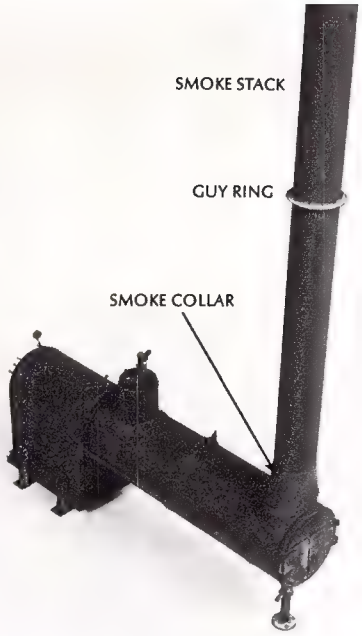


Photo 3. The smoke stack with its guy ring will not be permanently glued in place until the boiler is mounted in the boiler house.

on them with tweezers and held them against my plate glass working surface as I drilled them out. I drilled all the way through the bottom gauge cock and only halfway through the top gauge cock.

I found it best to first glue the water glass (a small pin with its head cut off) to the upper gauge cock. Then I installed the lower gauge cock (the one with the hole drilled all the way through it) onto the pointed end of the pin. But I did not glue the pin in yet. I picked up this assembly and test-fitted it in the two holes in the back head. Then I placed a drop of Hot Stuff at the joint of the lower gauge cock and water glass, and sprayed the joint with a shot of Hot Shot. Next I removed the water glass assembly from the back head. This resulted in all the parts being in the correct position to fit into the holes in the back head when I was ready to install the finished unit. All that was needed was to glue the fine wire gauge guards to the small shoulders on the cocks. I placed a small drop of Hot Stuff on the shoulders and with tweezers placed the gauge guards in place. Then the whole assembly was glued to the back head.

The rest of the back head detail parts go in place easily. You may want to paint your steam gauge white with a red needle and black numbers. On the prototype the hand hold crab allowed a hand access through the back head in case repairs were needed.

The rest of the assembly is easy. However, you will need to hold the globe valves that go on the injector steam pipe (Photo 2) with tweezers just as I did the gauge cocks in order to drill them. You will need to drill all the way through them. I did not glue the guy ring (Photo 3) or the smoke stack permanently onto the Boiler at this time because I wanted to wait until I installed the Boiler in my boiler house. Likewise, the exhaust tee and the steam tee (Photo 2) are not permanently attached. Thus I will be able to re-position them on the plumbing when I install the Boiler in my boiler house at a later date.

In the next part of this series I will discuss C.H.B. Line Shaft B Kit #WP-911. C.H.B. has two Line Shaft kits; kit WP-906 was designed for a small single blade mill. If you are building a double-blade mill, as I am, you will need kit WP-911, which will provide you with all of the line shafting necessary to drive the machinery in your mill.

Editor's Note: In the last issue I mentioned that C.H.B. Models had discontinued their line of sawmill machinery. C.H.B. wants me to mention that their mill engine (ME-900) and boiler (SB-850) are still in production.

Triangle Scale Models invites you to step up to the world of Sn3 and...

MAKE A SCENE!

Kit #104 — Stock Car — $44.00

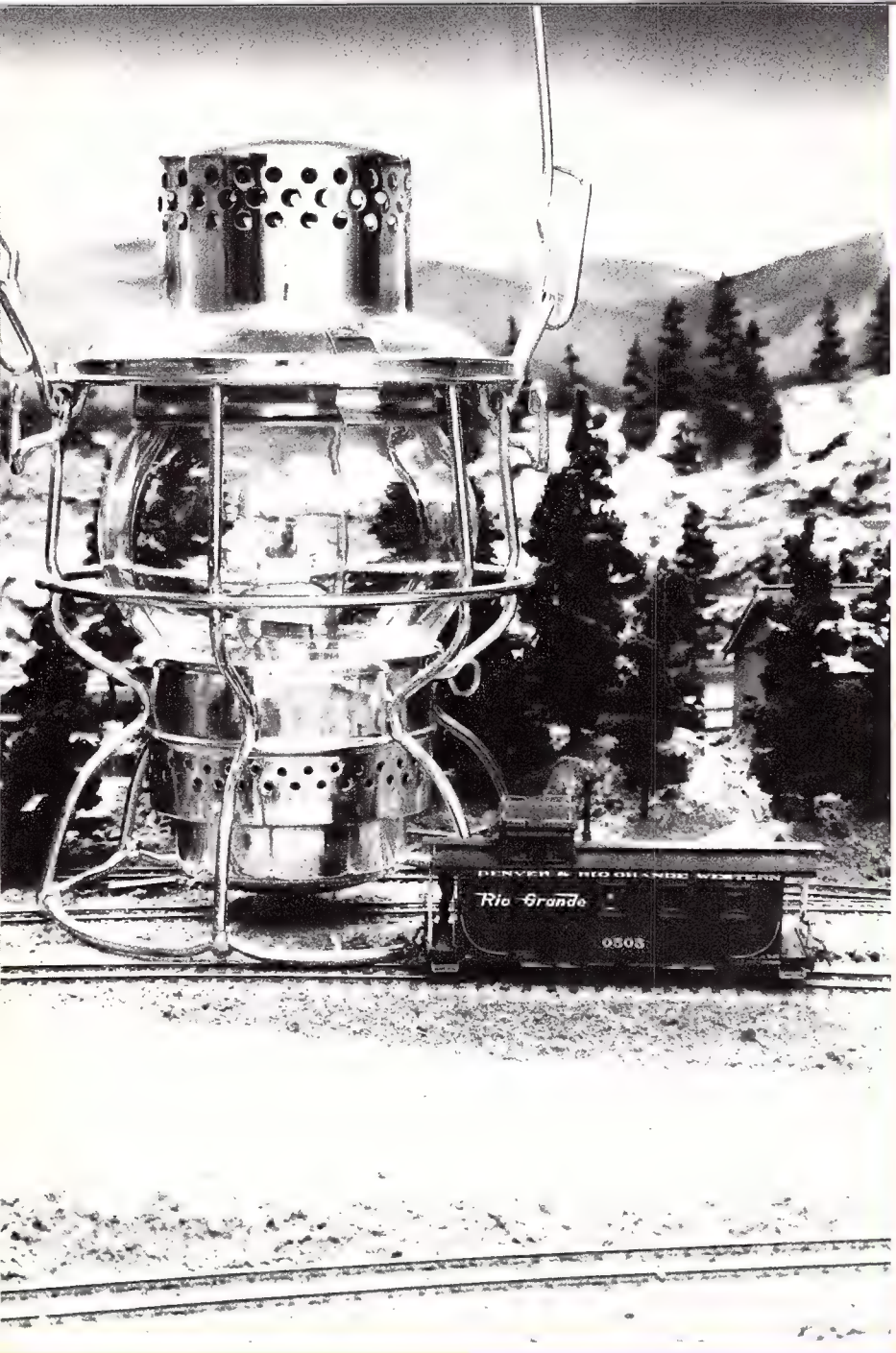
TSM SCALE MODELS

Kit #152 — Gas Station — $29.95

Figures from June's Small World
'34 Ford trucks from Chama Model Shop & Gallery

Mail orders: Add $3.00 for UPS on orders under $100.00

TRIANGLE SCALE MODELS P.O. BOX 566 CHAMA, NM 87520



Title photo:
The coveted Brass Lantern award next to the author's prize winning HOn3 caboose.

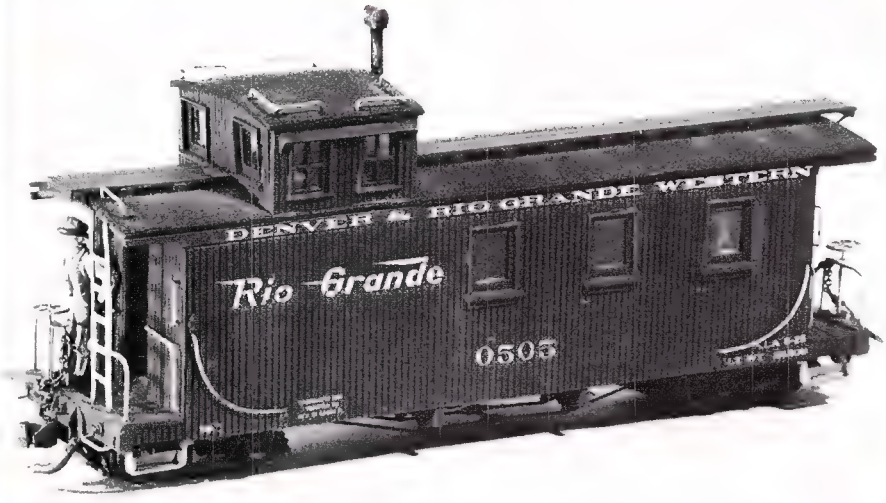
I hadn't planned on building a contest quality model when I started this project. I just wanted a light-weight caboose that would run comfortably around the 18-inch curves and up the four percent grades of my HOn3 layout. The trains I liked to run, consisting of an engine, five or six cars, and an imported brass caboose were just too heavy for for my layout.

Since my layout is based on the Denver and Rio Grande Western, I decided to make a D&RGW caboose. So, I went back through my 30-year collection of model railroad magazines and books and located everything I could about D&RGW cabooses. I even went to the steam museum at Laport, Indiana to look at their D&RGW caboose close-up. I wasn't very far into my research when I decided I was going to scratch-build Denver & Rio Grande Western Caboose #0505 but I continued to gather information until I finally felt that I had enough.

Before I actually began building Caboose #0505, I sat down and worked out the characteristics I wanted it to have. First, of course, I wanted it to be as light as possible. Since it was going to be a working model and not just sit on a shelf, it had to be strong – but I wanted all the parts to be to scale. And while I was at it, I decided that I might just as well have complete interior and exterior detail including full brakes.

I started with the floor. Because of those 18-inch radius curves, I placed the center sills on my caboose closer together than perfect scale would dictate, so the trucks can swing without hitting the sills on a tight curve. When I had finished laying out the floor joists (center sills and body sills) I glued the sub-floor onto them and glued the interior floor to the sub-floor. The sub-floor is scribed sheet wood with the boards running crossways and facing down so they show from the bottom of the car, just as on the prototype. The interior floor is also scribed wood but it has the boards facing upwards and running lengthwise, also prototypical. This double-layer method of construction gives the floor rigidity and forms a good base for the rest of the car.

Caboose #0505 in service on the author's HOn3 layout.



The high level of detail achieved on the author's HOn3 caboose is evident in these photos. The caboose has complete underbody detail and interior.

Next the couplers and trucks were attached and the incomplete car consisting of just the floor and trucks was run on the rails to see how it tracked. It negotiated those curves fine.

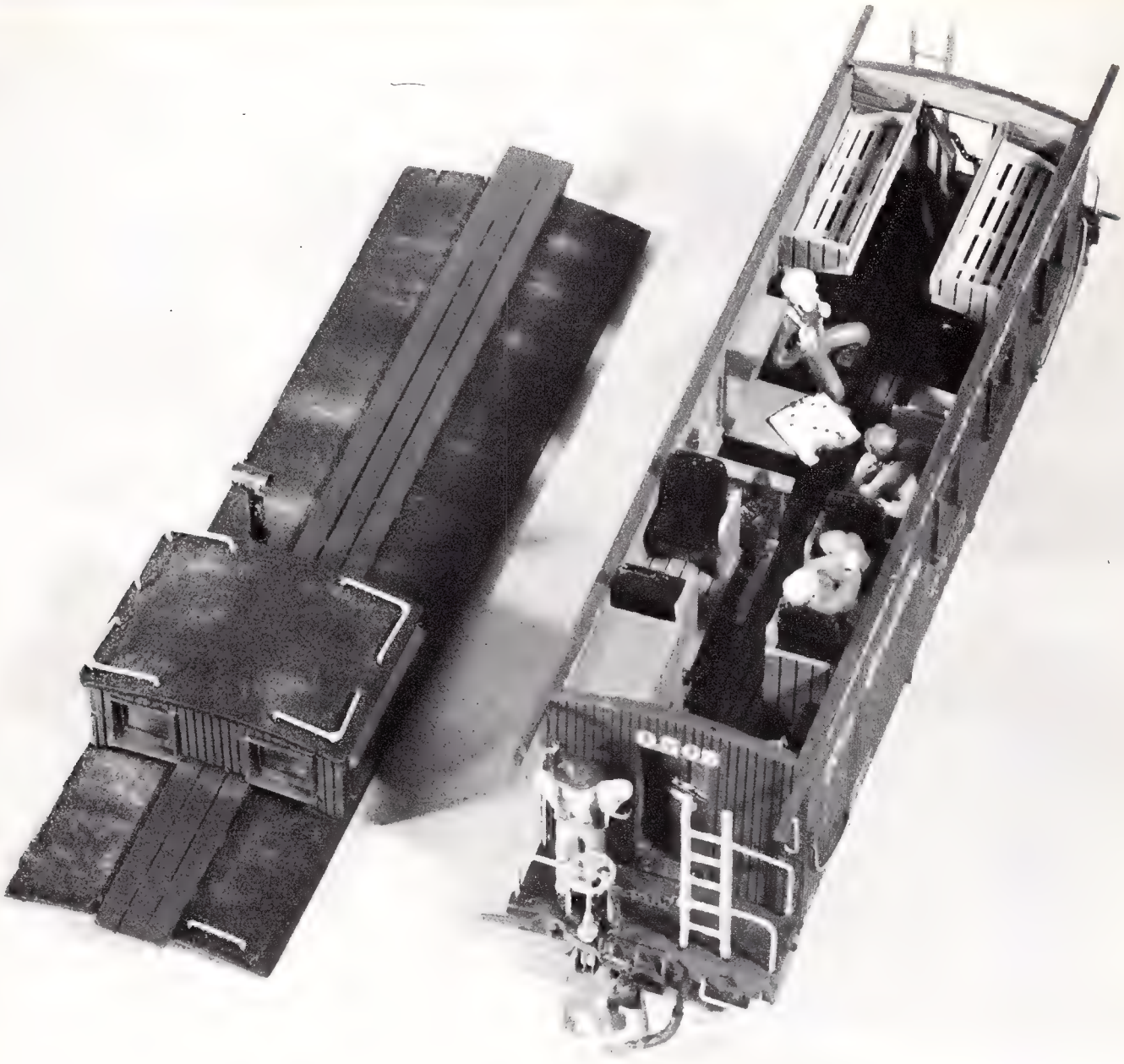
Like the floor, the walls were built from double-layers of scribed wood, this time the scribing is vertical on the outside and horizontal on the inside. After the layers of siding were glued together, the window and door openings were cut out and then the sides were glued to the floor.

The roof is removable and was built-up using scale lumber for the rafters and roof sheathing. To help me make the cupola I used a set of commercial caboose windows. Next the hole for the cupola was cut into the roof and the cupola was test fit but not permanently installed.

There was still a lot to be done on the rest of the caboose so I went back to work on it. I began installing all the details beginning with the underbody. Because certain parts had to go together in a certain sequence I had to stop and do some planning. The brake lines were the biggest problem because they go through other parts. I made my truss rods out of brass wire and soldered the turnbuckles in such a position that small locking boards could be run through the turnbuckles to keep them from "turning."

After the underbody details were complete I installed the windows and door frames. The end doors actually open and close. They are commercial castings with wire running up one edge to form a hinge. The wire projects out at the top and bottom of the door and fits into holes in the top and bottom of the door frame. Moldings were installed around the doors and windows on the inside.

Next the end-railings, brake wheels, ladders, side grab-irons, coupler pocket details, steps, and other details were added. With these items complete, the caboose



The little details make the difference in the interior of the author's HOn3 caboose. The bunks swing down, the doors open and the folding table folds.

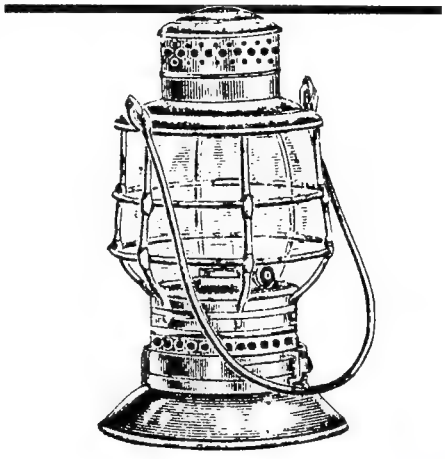
body was ready to be painted. The roof, however, was far from finished.

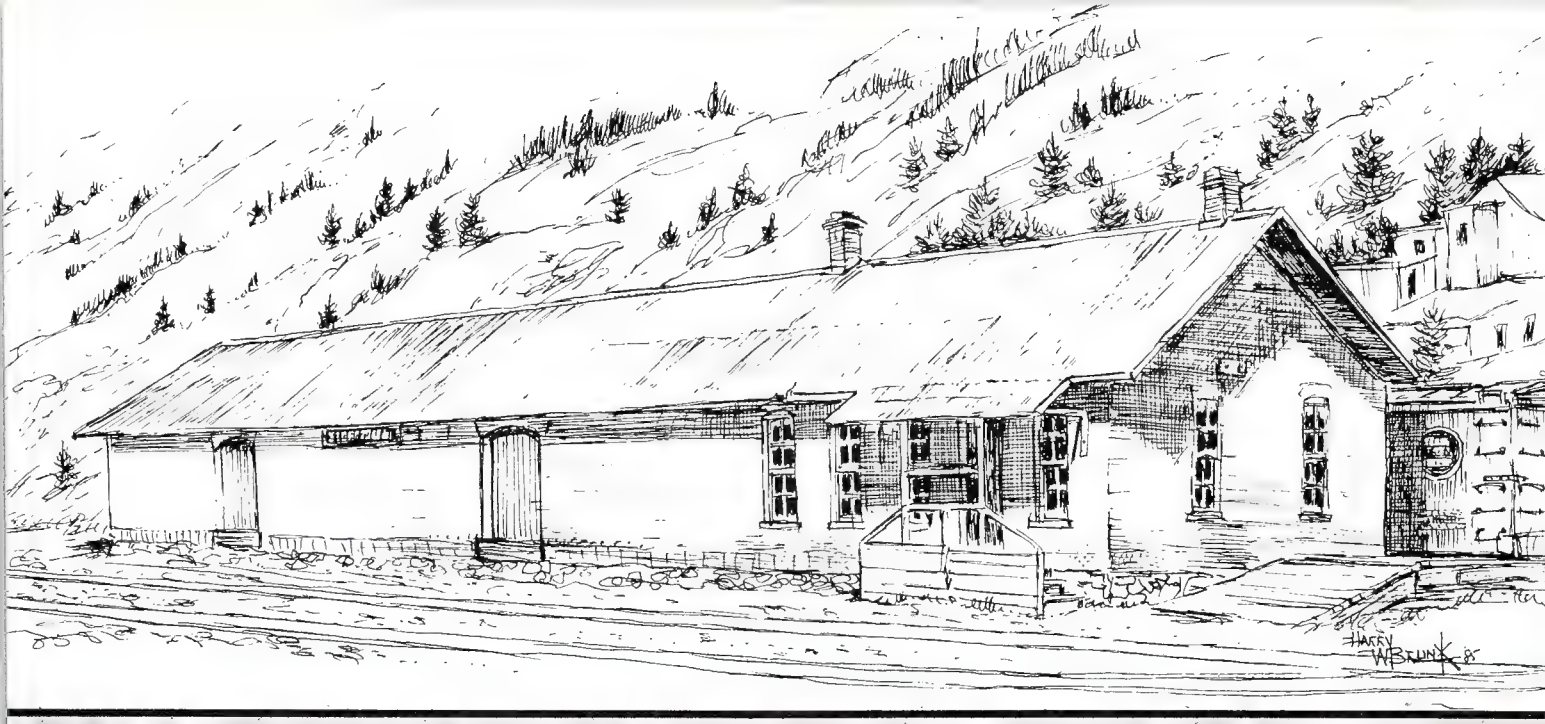
The tar paper roofing was simulated with facial tissue. I installed the cupola and constructed and installed roof walks and grab-irons. With the roof finished, the car was ready for spray painting. After the paint was dry I added the decals and some clear plastic window glazing. Only when all this was done was I ready to build the interior.

I soon learned that installing interior parts in a model this small can be difficult, especially installing movable parts such as swinging cabinet doors. I found that it pays to install interior parts one at a time, making sure each one clears every other part. On my caboose, both end doors swing open, the bunks swing down and the front of one of the wall cabinets swings down to form a table with a movable center leg to hold it level. The benches have to clear the swinging doors, the bunks have to fit up into their storage frames, and the table has to be at the right height and distance for a figure seated on the bench opposite it. This all took a bit of fitting but eventually everything came together. The cabinets, stove, desk, sink cabinet, and other details were added after these movable parts were in place. My last step was to paint and install the figures.

When I was building this caboose in 1980, I never dreamed that it would win the United Transportation Union's Brass Lantern Award at the 1985 NMRA Convention in Milwaukee. I just wanted a lighter caboose to run on my layout. However, when I realized that I had built a contest quality model, I had to build the next model to the same or even higher standards. I find that now I am doing each construction project to the highest level I can achieve.

All in all, this was a fun project. In fact, I enjoyed it so much that to date I have made four other cabooses all with complete interiors and as much detail as possible.





Up Clear Creek on The Narrow Gauge

Part 36: Georgetown Station

by Harry Brunk

I am not going to include the towns of Fall River, Dumont, Lawson, and Empire in my description of the Clear Creek area because I was unable to include them on my HOn3 layout. I may present plans for the Dumont and Empire stations later on in my series. I *do* have one very small free-lanced town between Idaho Springs and Georgetown on my layout that represents these towns as well as the many mine and mill sidings that were scattered along the way between Idaho Springs and Georgetown.

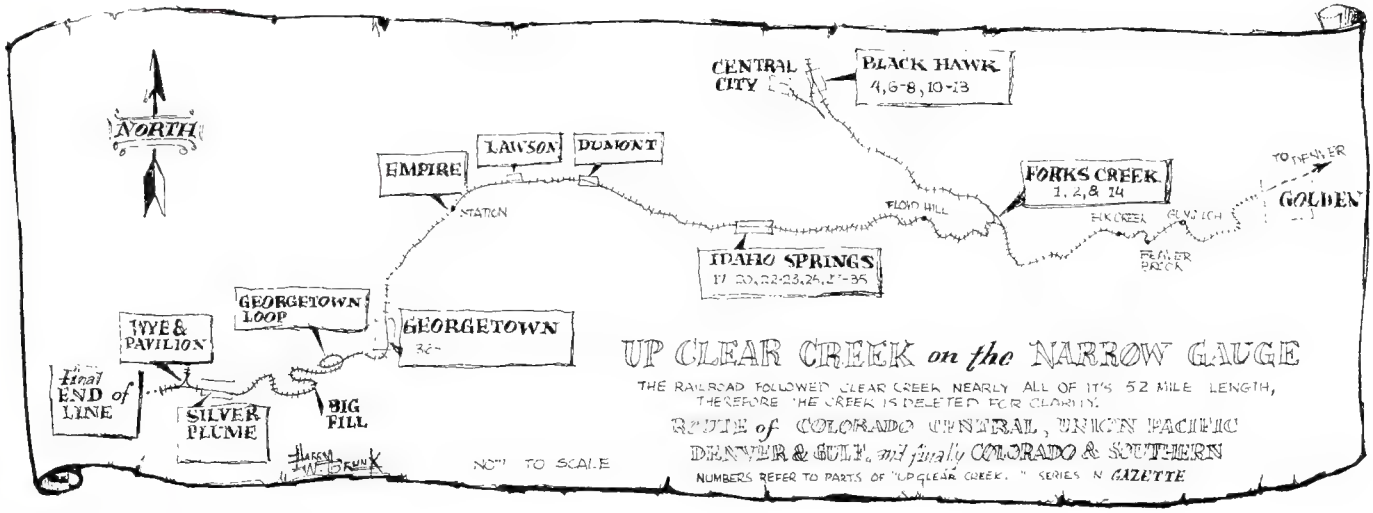
The main minerals mined in the Clear Creek area were gold and silver – the Golden area produced mostly gold but the ores tended to have more silver further west towards Idaho Springs. The nearer we get to Georgetown, the more silver was mined. Although the Georgetown mines did produce gold, the main mineral mined in the Georgetown area was silver.

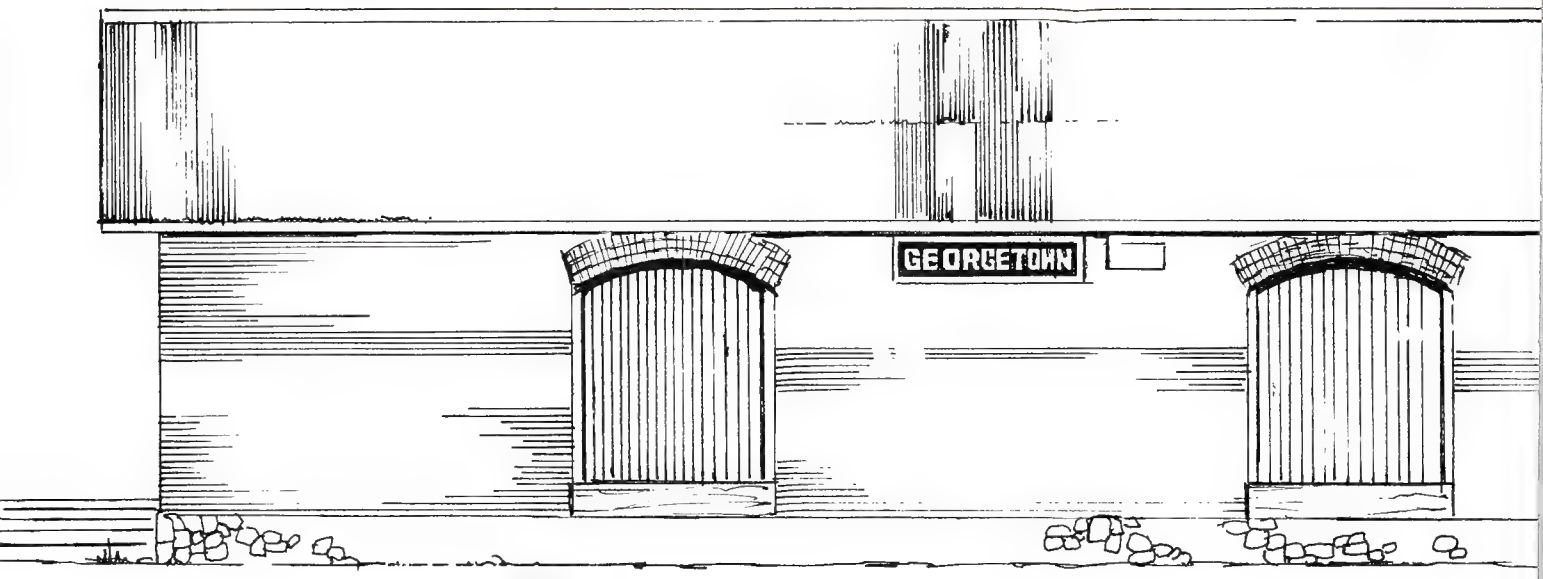
Georgetown was Colorado's early "Silver Queen." The fact that she lost that title to the town of Leadville in a relatively short period of time in no way diminishes Georgetown's importance in the history of Colorado mining.

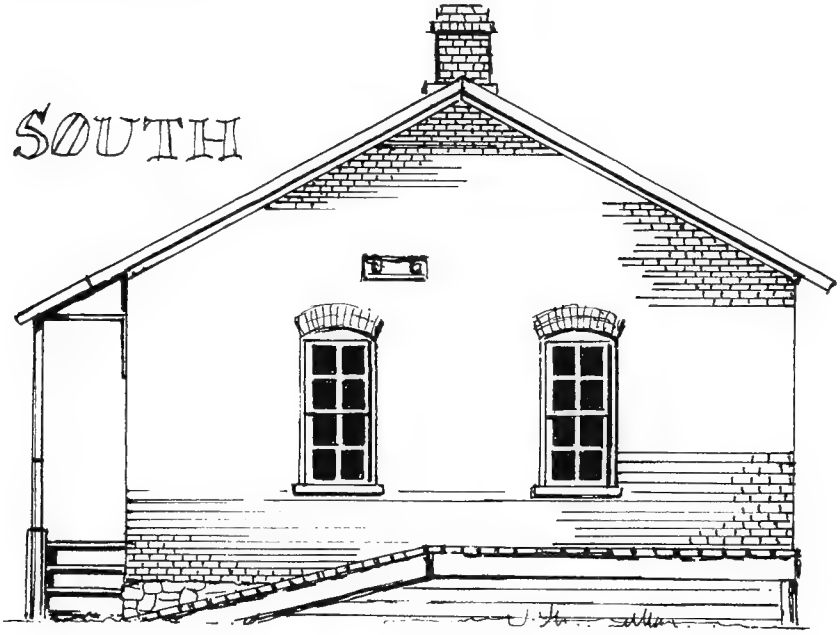
This predominance of silver was important to the development of Georgetown. By August, 1877, when the Colorado Central Railroad arrived in Georgetown, the town had already undergone a sequence of boom-and-bust in its economy.

Three factors helped to smooth out the Georgetown area's economy. First, technology had finally solved the silver smelting problems that had plagued silver mining. Second, the mines in the area began to

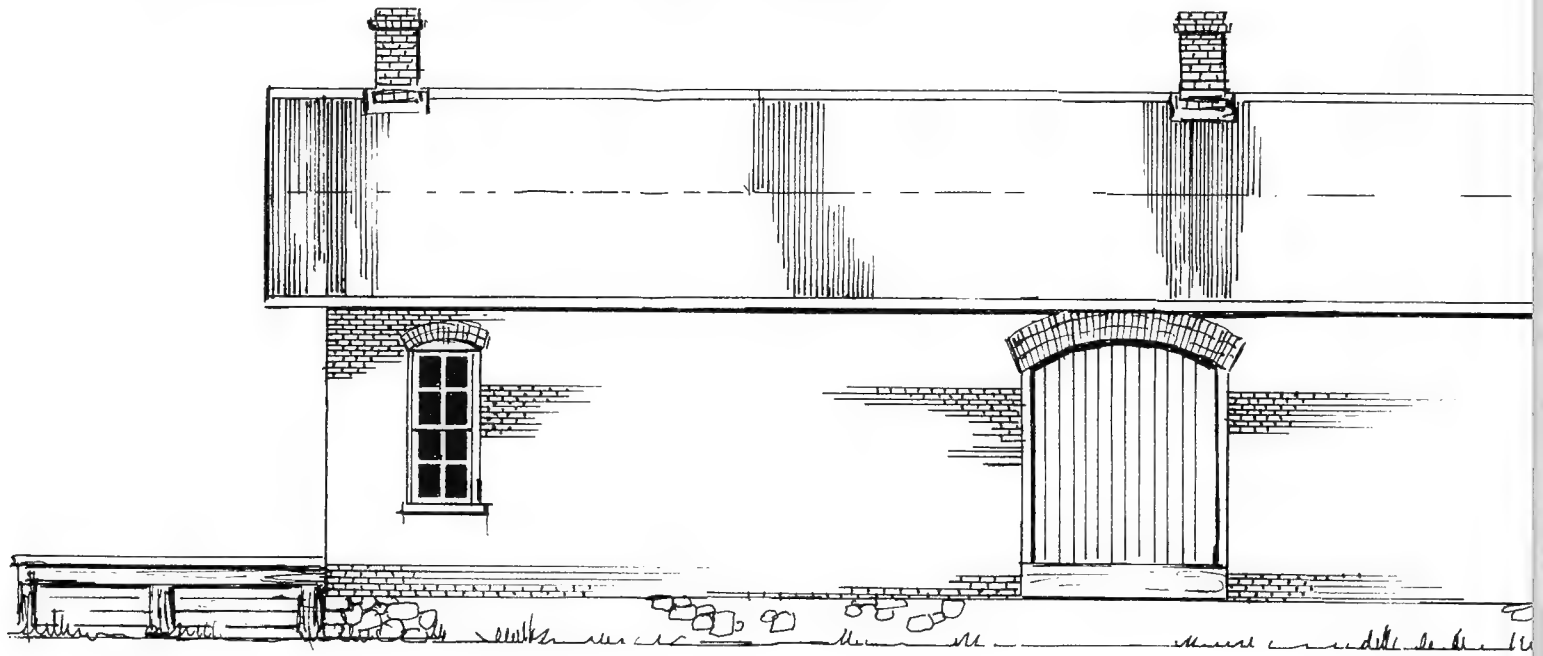
Title illustration: The Georgetown station as it appeared in the final days of rail service. Only the pattern remains on the brick to show where there might have been a freight platform at one time.

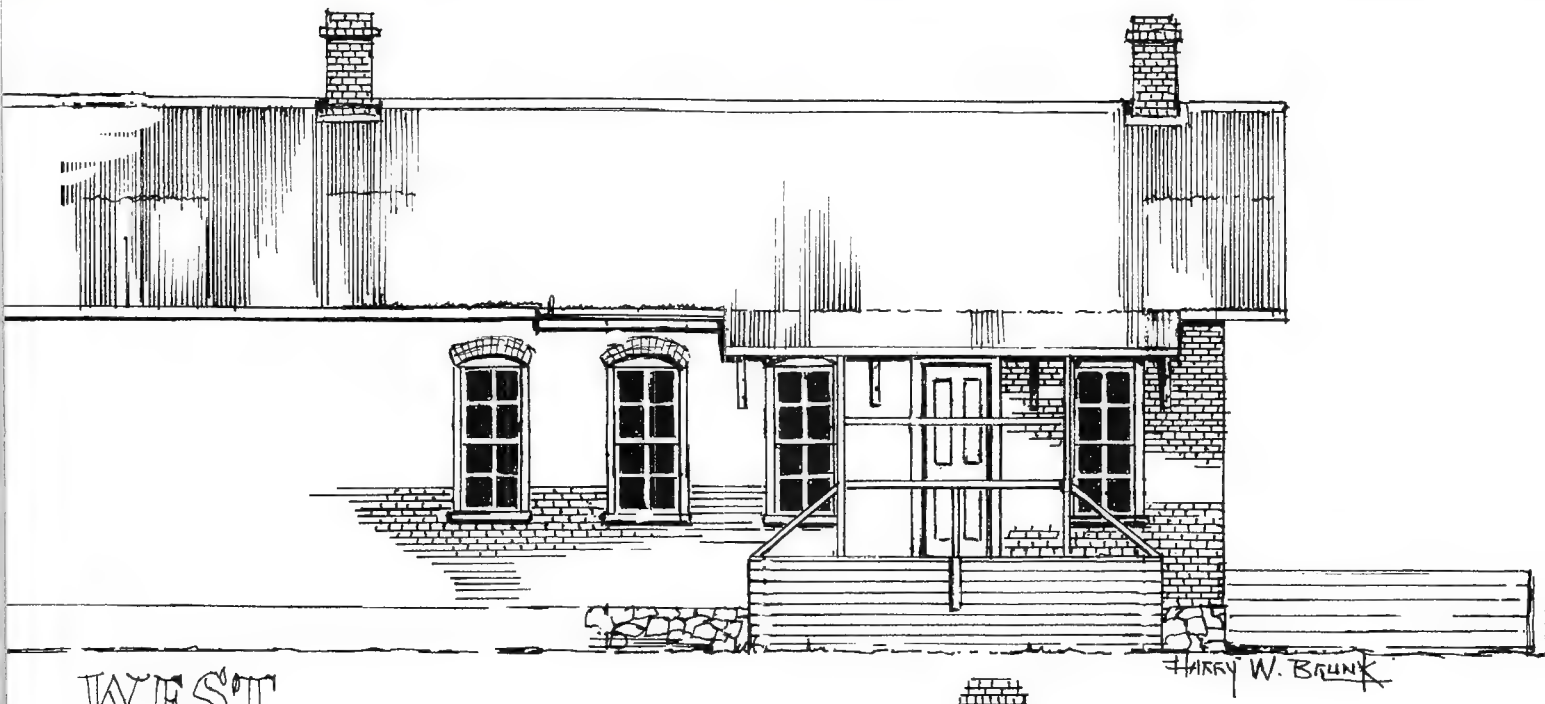






GEORGETOWN STATION

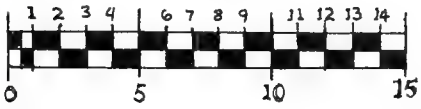


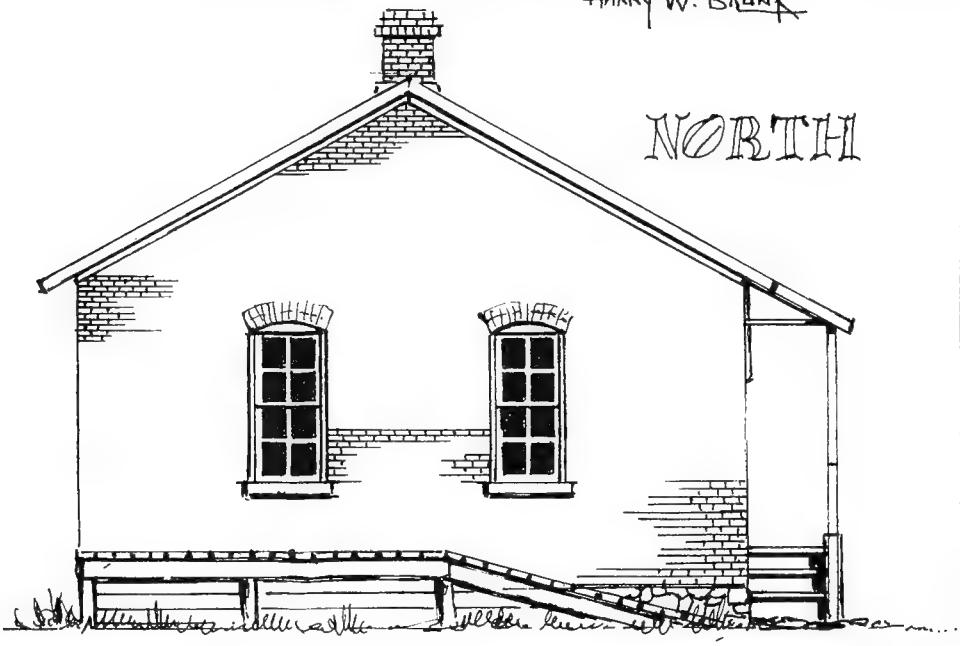


WEST

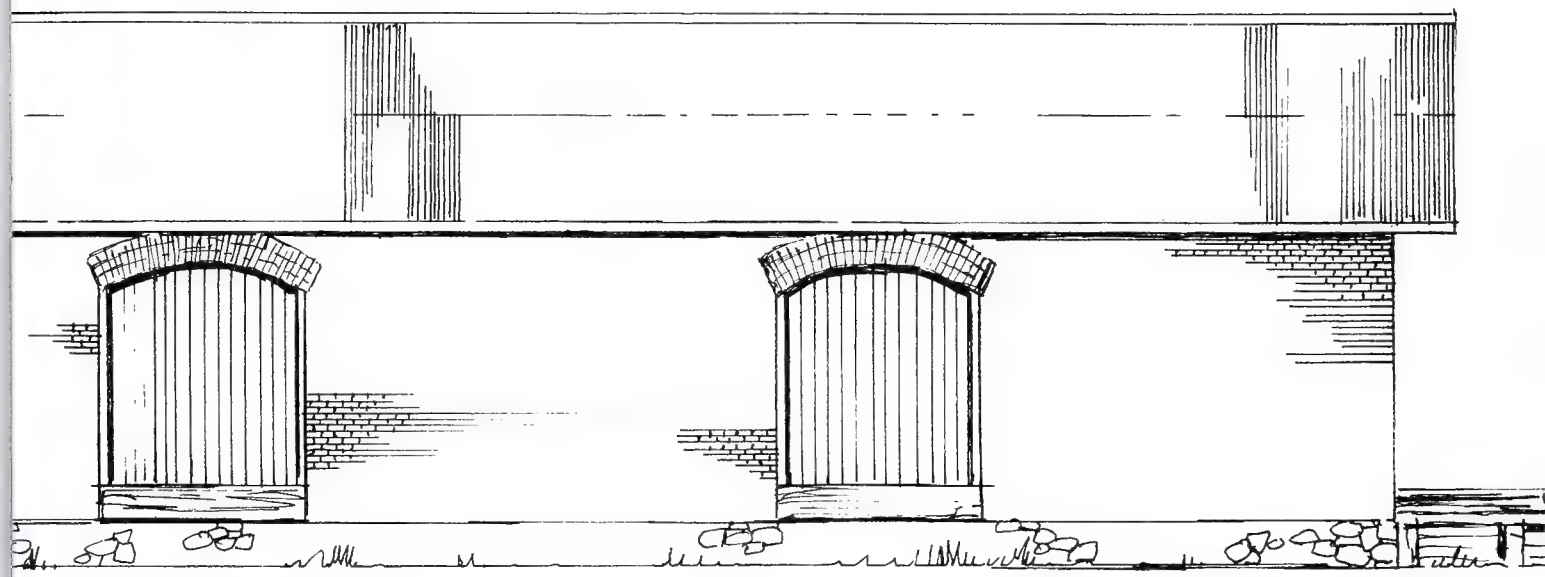
NORTH

HO SCALE





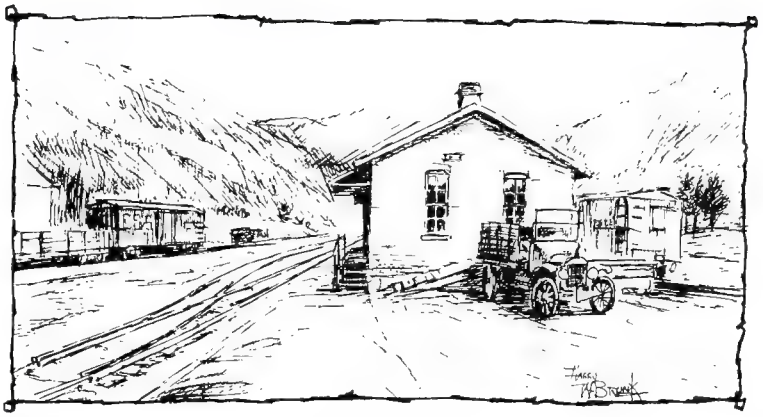
EAST * SEE TEXT



This photo of Georgetown (looking north) was taken in the 1920s. The station is at the end of Rose Street (dividing the center of the photo). The station roof is above the large clump of trees near the center of the photo. *Photo by Frank J. Duca.*

The Georgetown station exists today as part of a motel complex called The Alpine Inn (the motel's restaurant is located in the original part of the old station building). The rear (east) side has been expanded and other doors and windows have been bricked up or changed. An Alpine-style facelift disguises the station now but many original door and window openings have been incorporated into the renovated building. *Photo by the author.*

The front and back of the author's Georgetown station before it was installed on his layout. The roof, doors and window trim are green. *Photos by the author.*



Sketch A: Late 1917 and the world is at war. Business has slowed down and the trains run in abbreviated form. The main line goes behind the trees in the right background, heading toward the Georgetown Loop and Silver Plume.

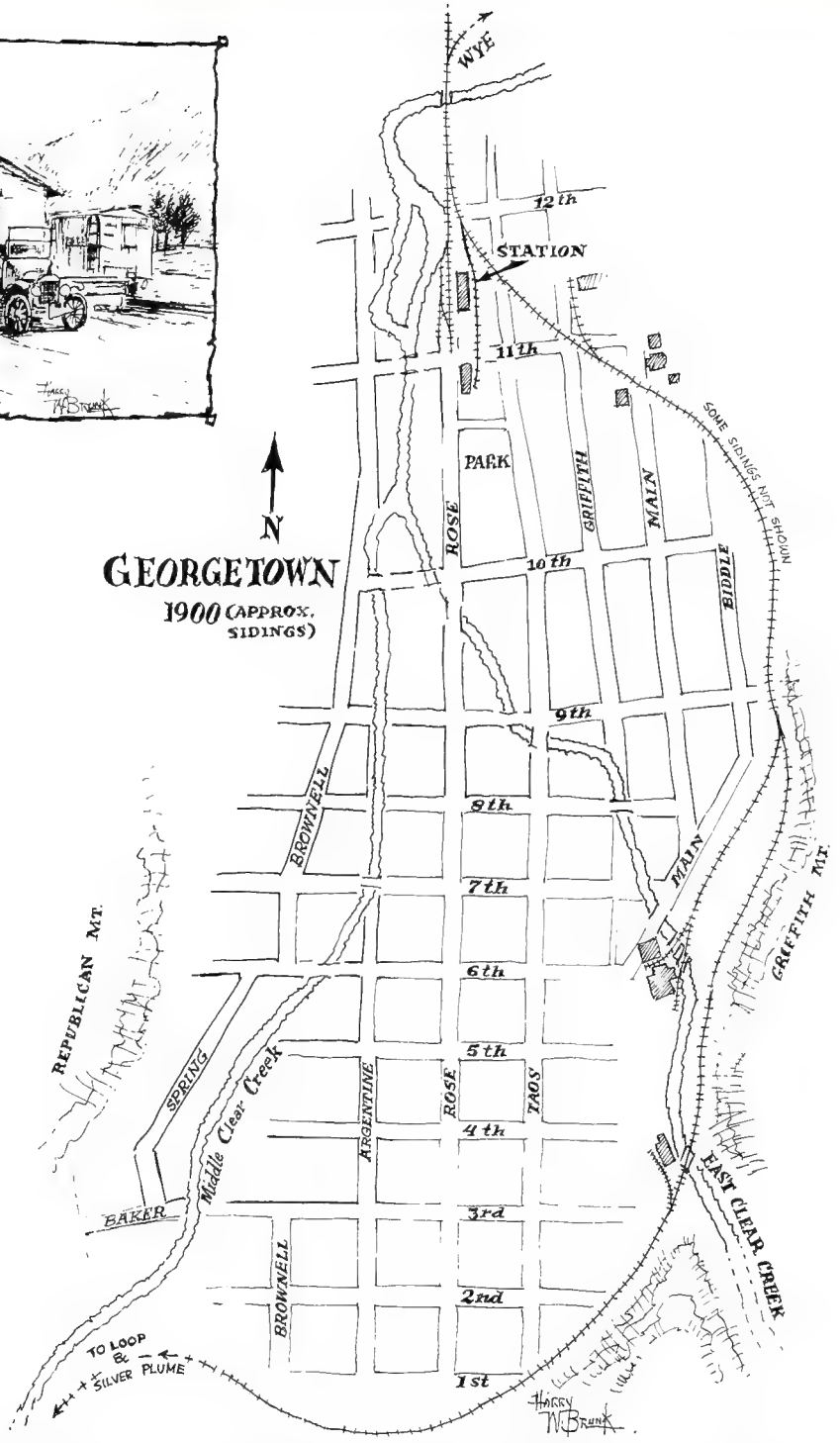
consolidate after a bad slump in silver prices in the 1860s. Third, the arrival of the railroad provided cheaper transportation that led to more economical silver production. Even with dropping international silver prices in the 1870s the area still quadrupled its income from prior years.

Georgetown became a prosperous and attractive community, even after a boom in Leadville siphoned away much of the new capital and population from the area.

The railroad circled the eastern and southern edges of Georgetown, using the rising sides of the mountains to gain the altitude needed for the climb to Silver Plume. The Georgetown station was actually on a spur on the northern fringes of the town. Unlike Idaho Springs, the railroad never really entered Georgetown, but skirted it. There was a small network of sidings near and around the station, but I have been unable to find a detailed map showing these tracks. Sketch A gives some hint as to the yard tracks around the station, but beyond this sketch I am unsure of their location. **GAZETTE** author Rick Steele pointed out to me that the wye dropped from official records after the early 1900s, but I suspect it existed for some time after that. Photos of the town show traces of the wye well into the 1920s.

Georgetown sits in a bowl-like setting in the southern end of a valley rather broad by Clear Creek standards. The eastern and southern edges of the valley provided settings for most of the mills and mines in Georgetown and the railroads sported a number of sidings to serve these mills and mines. In forthcoming parts of my series I will describe some of these mines as well as other points of interest in Georgetown.

The station at Georgetown was built of brick. I have had to "best guess" the back side of the building because I have no photos of its back or eastern side. My model has only the freight doors but the plan shows a window behind the office area. Your guess is as good as mine on the door and window location on the back side of the station.



Platforms around the station appear to have undergone considerable changes through the years. Early (1878) photos show a stairway on the south side, leading south from what appears to be a full length platform on that side of the station. I suspect there was also a full length platform on the west side in the early days, but all the photos I have seen have trains blocking the view of the platform. Sketch A, and my model show the end platforms as they were from 1917 on to the end of service. My model sports an abbreviated, ramped freight platform on the west side, but this is pure guesswork on my part. The porch-like platform at the office end is as it appeared in the station's final years, but there is no clear evidence showing where a freight platform may have existed on the west side of the station. There is some evidence that a 32-foot long platform existed on the east side of the building. However, I have only shown platforms on my plan that I am positive did exist.

The model track plan for the Georgetown station area on my HOn3 UC&N was doctored considerably to fit my space. The UC&N Georgetown station sports a station board the prototype probably never had. Beyond these changes my Georgetown area is fairly close to the prototype.

The Stewart & Wing Company built its business south of the station. It was one of those companies that "did it all," since they handled grain, hay, lumber and coal. I will feature this interesting industry next in *Up Clear Creek.*

Snowplowing Over Diablo Pass

by Paul Scoles
Photos by the author

Opposite: Pelican Bay Railway & Navigation Company Rotary #1 clears a deep drift on Diablo Pass in January "1896." This rare action shot of a rotary at work shows the power and fury of these machines in operation. It is not recommended that you take photos from the downhill side of a working snowplow.

The author's Sn3 rotary snowplow was built over an HO gauge Athearn snowplow. The original Athearn rotary blade and blade housing were used on the Sn3 model. The HO plow body was also used by covering it with scribed sheet styrene.

Since rotary snowplows have always interested me I decided to build one when I started constructing equipment for my Sn3 Pelican Bay Railway & Navigation Company. Although my model is freelanced it generally follows the dimensions and details of several Grant-built 1890 Leslie rotaries shown in Gerald Bests's book, *Snowplow* (Howell-North, 1966) and easily falls into the "it could have been" category.

I decided to use an HO gauge Athearn snowplow as the basis for my model. I found that the blade and blade housing were the right size for Sn3 and that the HO snowplow body could also be used in Sn3 if it was covered with some scribed Evergreen Models styrene sheet. I added many small detail castings from Tomalco and the Village Depot. Regauged HO trucks were used on the snowplow. The canvas roof and cab curtains were made out of painted tissue paper.

My tender is an old Model Die Casting HO gauge shell with Grandt Line Sn3 trucks and a styrene coal bunker. The rotary is painted Floquil's Tuscan Red with white lettering and a black plow and roof. The tender is Floquil's Grimy Black with white lettering. I weathered the model so it looks as if it was in good condition but had been in heavy use.

Once I had the model finished I knew I would have to take a photo of it in a snow setting. So I decided to make the rotary blade move by using a small can motor and rubber bands to drive the main shaft. The power is fed into the model by a pair of removable wires that plug into the floor of the rotary.

Taking the color action shot shown in this article proved to be an interesting challenge in miniature photography. It required the efforts of three people and a large dose of luck. The heavy "snowfall" shown in the photos of Diablo Pass is actually a liberal application of baking soda, sifted until the desired "snowfall" was achieved. The rotary was actually plowing the "snow" in the action shot. The baking soda was later removed with a vacuum cleaner and Diablo Pass was none the worse for it.

My friends Geoff Stippes and Bob Madden were indispensable in helping me take my action photo. In fact they devoted an entire Sunday afternoon to helping me. There were two problems in taking the action photo. First, the plow had to be actually moving when the photo was taken. The plow had to continuously dig into a "snowdrift" in order for the "snow" to be thrown from the plow's chute, thus it had to move steadily forward. Second, the plow threw a lot of "snow" – some of it a long way. As the plow moved along it threw so much "snow" into the air that it was almost

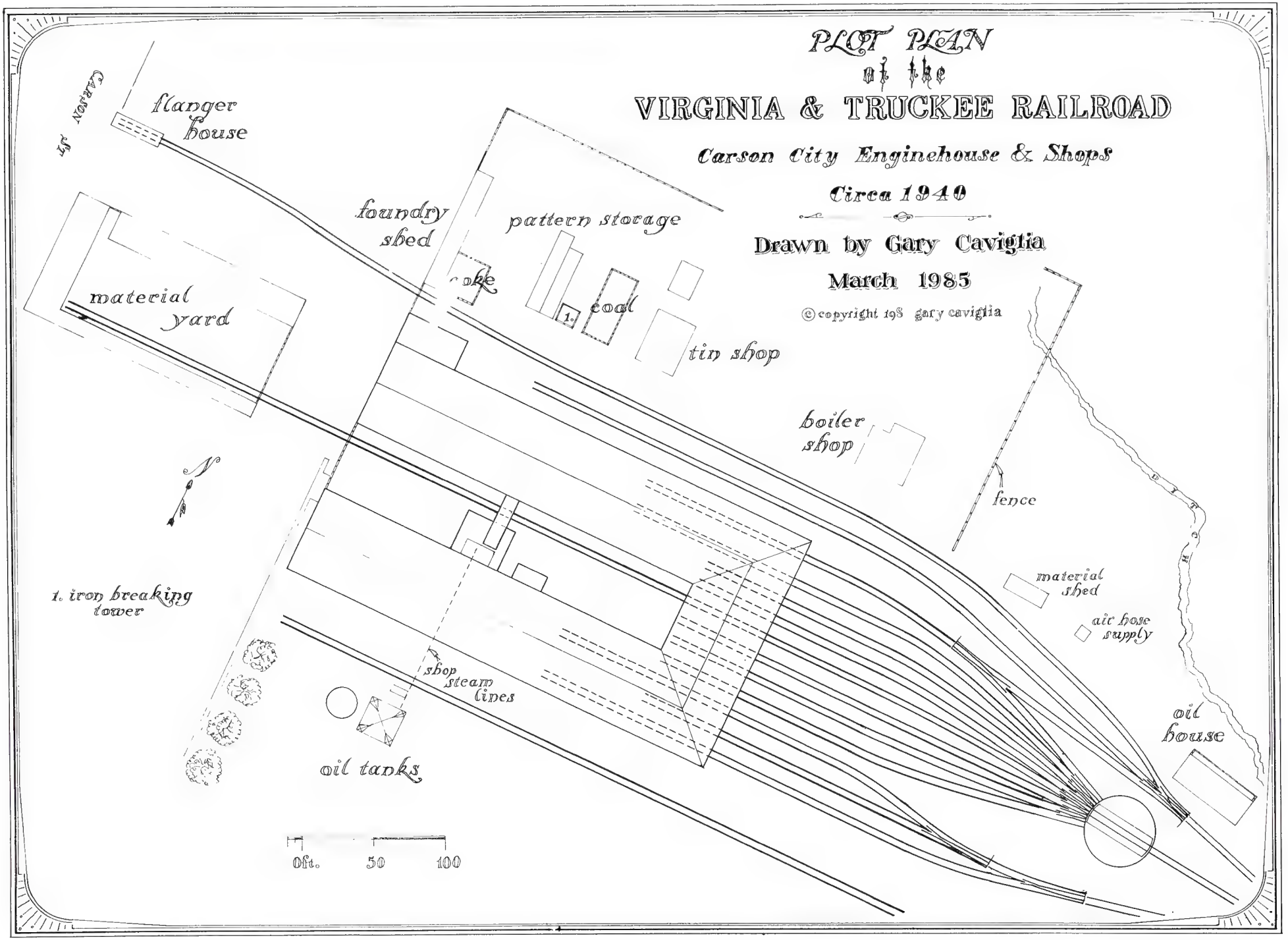
hidden and taking a photo became a problem. Moreover, a fine layer of baking soda began to build up on the camera lens.

It was important to catch the plow at just the right moment with a nice plume of snow at a good angle, with the correct exposure, and decent looking cotton "smoke" exhausting from the plow. With all of these variables you can see why we had to rely so heavily on luck.

After several false starts we decided that Geoff was to push the rotary steadily forward into a "snowdrift" while dangling the cotton "smoke" with his other hand. This is tricky at best and takes steady hands. My job was to look through the camera viewfinder, snapping photos each time I thought the scene looked right. Bob replenished the baking soda after each pass through the scene. We shot three 36-exposure rolls of film that afternoon, yielding three acceptable photos. All of us, my Diablo Pass diorama, the camera and light meter, and everything else in my den were covered with baking soda. But I think you will agree that the results were worth it.

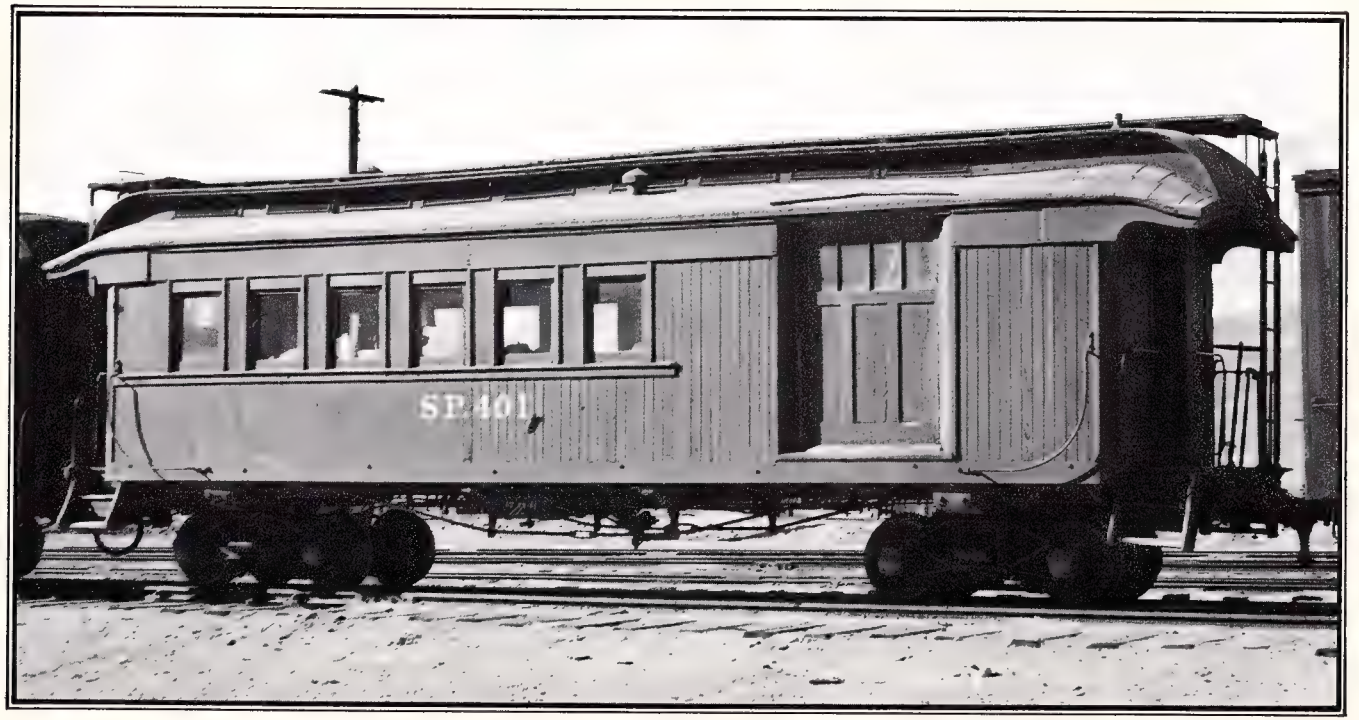
The rotary derailed near the summit tunnel on the Diablo Pass line. The crew waits for help in rerailing the plow so it can be on its way.

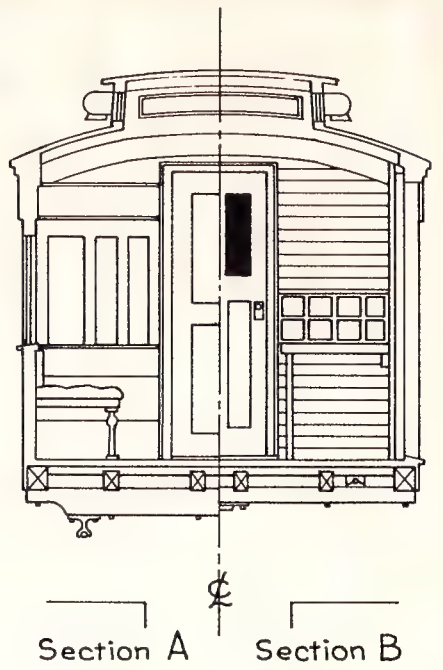
Amid a light "snowfall" a rotary is being readied to fight the deep "snowdrifts" at higher elevations. This was a scene often repeated on the narrow gauge lines of the western United States.

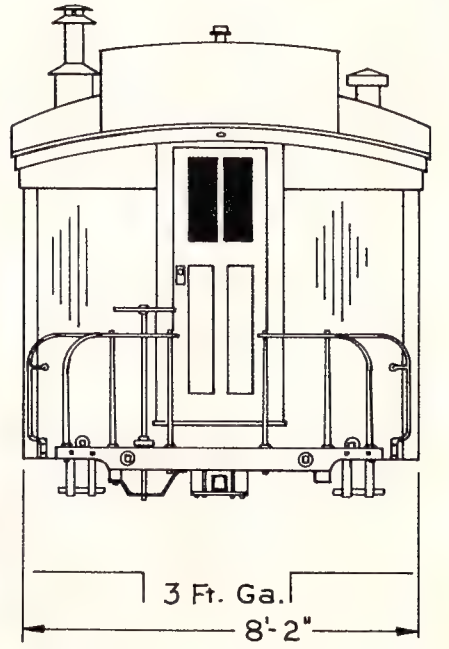

PLOT PLAN
of the
VIRGINIA & TRUCKEE RAILROAD
Carson City Enginehouse & Shops
Circa 1940
Drawn by Gary Caviglia
March 1985
© copyright 198 gary caviglia
Carson St
flanger house
foundry shed
pattern storage
coke
coal
material yard
tin shop
boiler shop
fence
material shed
air hose supply
oil house
1. iron breaking tower
shop steam lines
oil tanks
0ft. 50 100

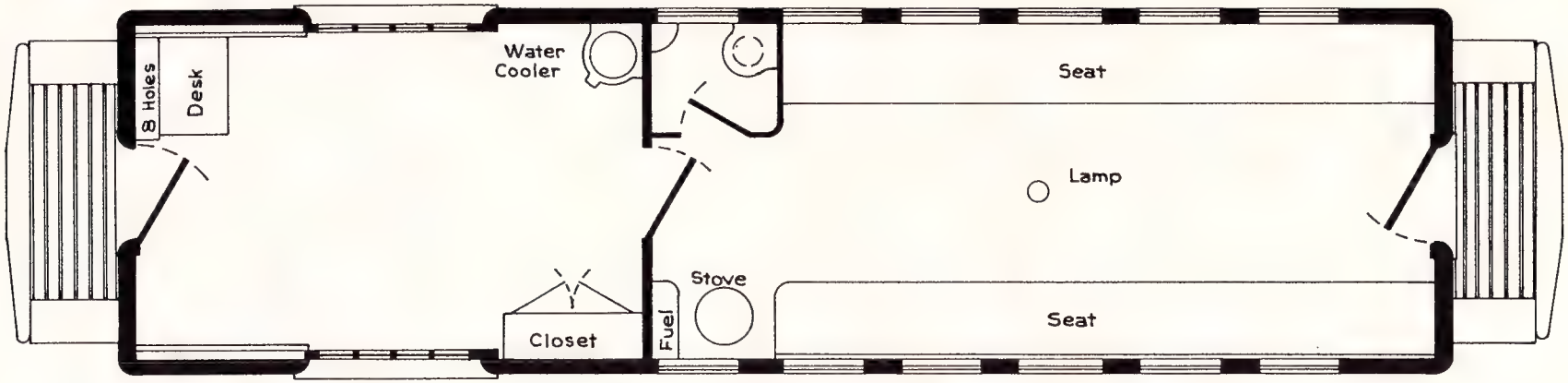
Southern Pacific Combine 1009

Southern Pacific combine 1009 was built for the San Joaquin & Sierra Nevada Railroad by Carter Brothers in 1888. She went to the South Pacific Coast Railroad and then on to the Southern Pacific Narrow Gauge where she was used in maintenance-of-way service. She was later re-built as a caboose and eventually sported a flat roof. The car is now on display at Laws, California. *Photo by Richard F. Thomas.*



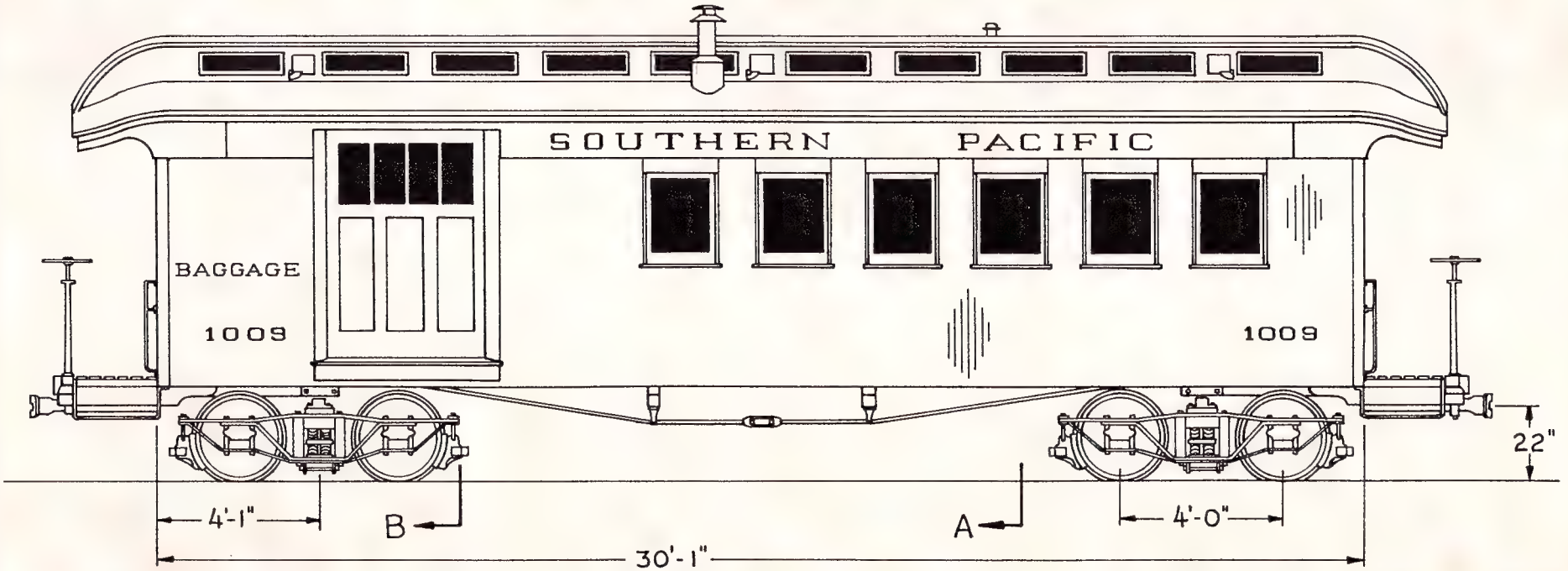






SP Floor Plan 1303, Feb. 2, 1898

Drawn by Hermann H. Darr
Scale: ¼ inch = 1 foot



A WELSH SLATE QUARRY LOCOMOTIVE FACILITY

by Jerrold R. Kinney
Photos by the author

The display shown in these photos depicts a small Welsh slate quarry locomotive facility that will eventually become part of my Mineral Valley Tramway layout. The display was built in 7mm scale, 30-inch gauge. No commercial parts or castings were used on the display; I made all of the castings from my own patterns in a home-made centrifugal casting machine.

I started with a plywood and styrofoam base and built the hut first. The "stones" for the hut were cast individually and "mortared" together, stone by stone. The hut has a complete interior, including teacups, tea tin, and hot water pot.

I included complete underbody detail in the slate wagons and built them up as their prototypes would have been. The internal combustion locomotive is mainly styrene; it is a model of a World War I trench engine (McEwan Pratt) and is completely detailed, including over 50 parts such as spark plug wires and fuel lines in the engine-transmission unit. The cab has full detail also.

I made the waste slate scattered around the display from plaster of Paris poured in sheets, cut or broken-up, dyed, and then glued in place. The grass is dyed hemp and the corrugated iron sheet was made by scribing sheets of the foil used to cover necks and corks of wine bottles. I cut the rails to the correct lengths and installed joint plates. My diorama was completed by weathering it with pastel crayons and baking soda.

Building this small display was a lot of fun. What I enjoyed the most was the amount of detail I was able to include in such a small space. The display won the Best in Show Award at the 1982 Pacific Northwest Region Convention of the NMRA.

The author's 7mm scale, 30-inch gauge Welsh slate mining diorama includes a great deal of detail in a small space. The diorama is designed to fit into his Mineral Valley Tramway layout.

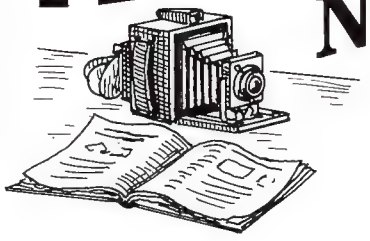
It's tea time for the engineer and repair crew and the kettle is on the stove.

The Mineral Valley Tramway uses this unusual internal combustion locomotive on its slate quarry line. It is an ex-World War I trench McEwan Pratt engine.

The author's Welsh mining display is full of interesting details. Note the pumping arrangement on the small fuel tank, and the upturned slate truck behind the fuel tank.

These two slate trucks have complete underbody detail. The one on the right is up on blocks being worked on – it looks like the crew is changing an axleguard.

The MODELMAKERS NOTEBOOK



by Al Armitage

Yet Another Timber Bridge

This is the fourth and last of the unusual timber bridges from that logging line near Crannell, California. (Incidentally, the correct name of the company that built these bridges is the Hammond & Little River Redwood Company *not* the Hammond Little River Lumber Company as stated in previous parts of this series. Thanks to Doug Richter for pointing out this editorial error.) Drawing these bridges was an interesting experience. Each was somewhat different in design from the others, though they are all basically similar. The fact that they were all authentic prototypes on a logging railroad made them especially attractive to me. Definitive data on such structures is not often available at this late date so I'm glad to have helped preserve it.

The first three articles of this series were published in the September/October 1984, May/June 1985, and July/August 1985 issues of the **GAZETTE**. The first two of those articles had photos so you can refer to them for construction details of the bridge presented here. As with the others, the timbers of this bridge were redwood and all the joints not fastened with bolts were fastened with "boat spikes" – best modeled using very small common pins called "lills."

The drawings show the locations of the "drift bolts" in the prototype; many of these would be invisible in the finished structure so they are not needed on a model. The ones that can be seen, such as those holding the floor timbers in place, are all square-headed bolts with washers.

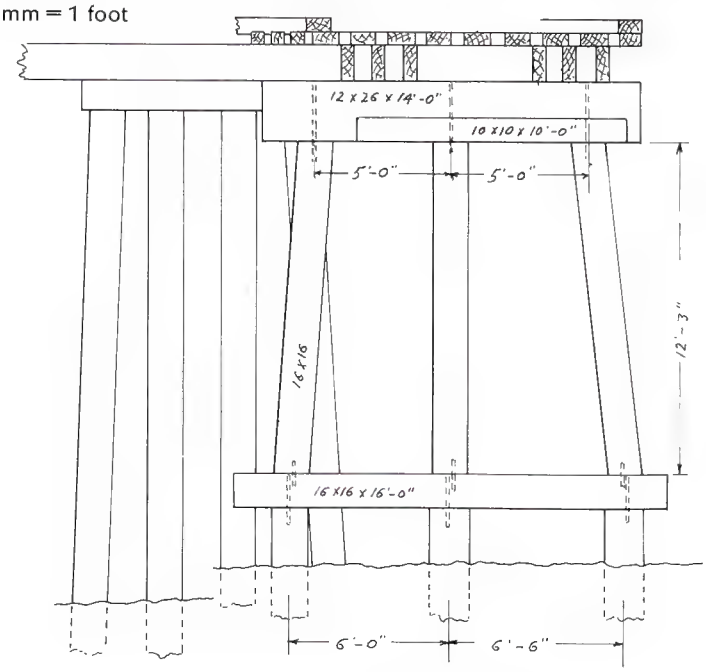
The main supporting bents on this bridge are of a slightly different design than those of any of the other spans in this series. I guess the Hammond engineers either didn't believe in standardization or really liked to experiment. On the prototype, the track followed an eight-degree curve and was super-elevated. This carried over to the trestle work on both sides of the bridge as well. To simplify the plan for model construction, I took the liberty of making the track straight and eliminating the super-elevation.

As with the other bridges in this series, this one can be adapted to the particular scenic conditions on your layout. If you have the space you can include the trestle approaches shown in the profile drawing. Although they are not essential, they would set off the model very nicely and make it a much more impressive structure.

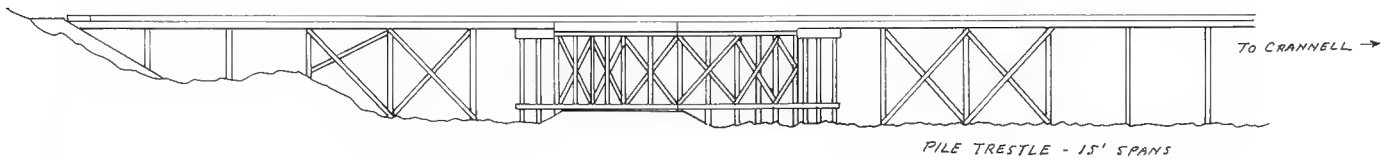
I'm working up some information on camp cars, another logging railroad item about which little has been published in the past. Look for it in this column in the near future.

AL—o

Scale: 3.5mm = 1 foot



SECT. C-C

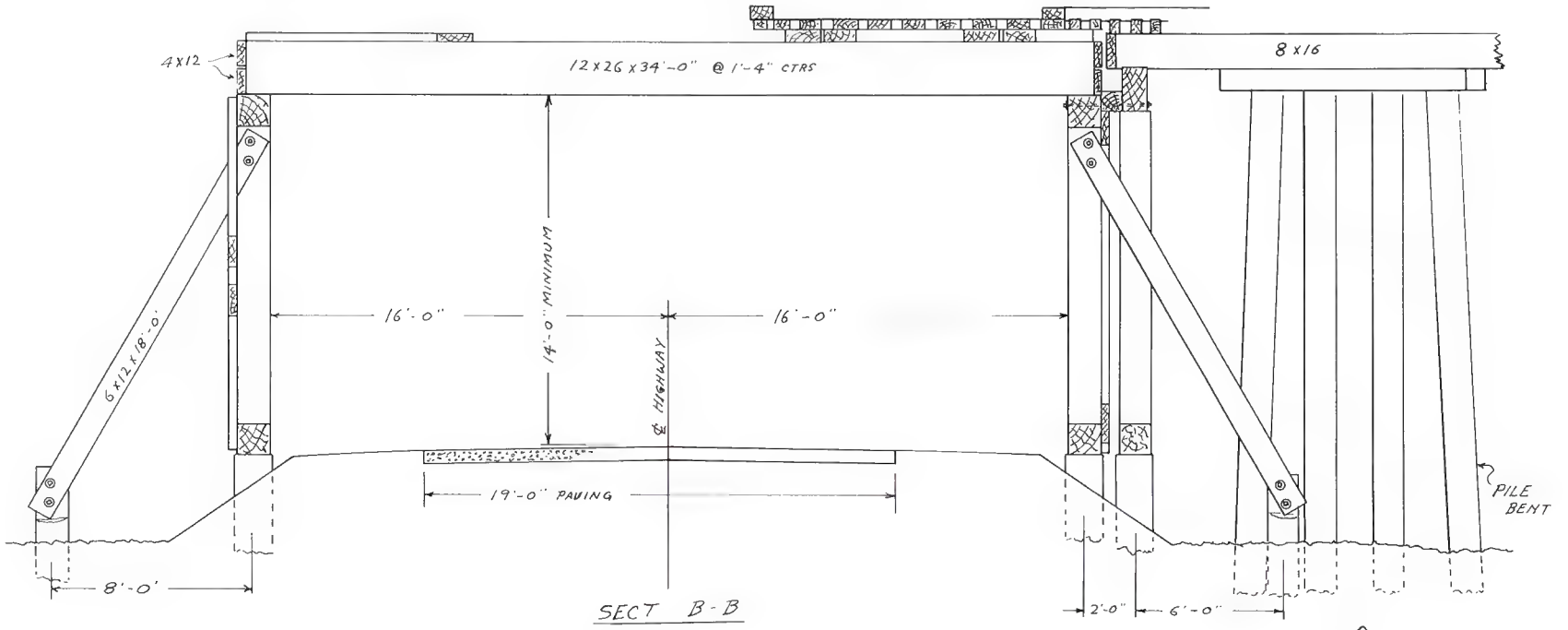


PROFILE

SCALE: 1"=20'-0"

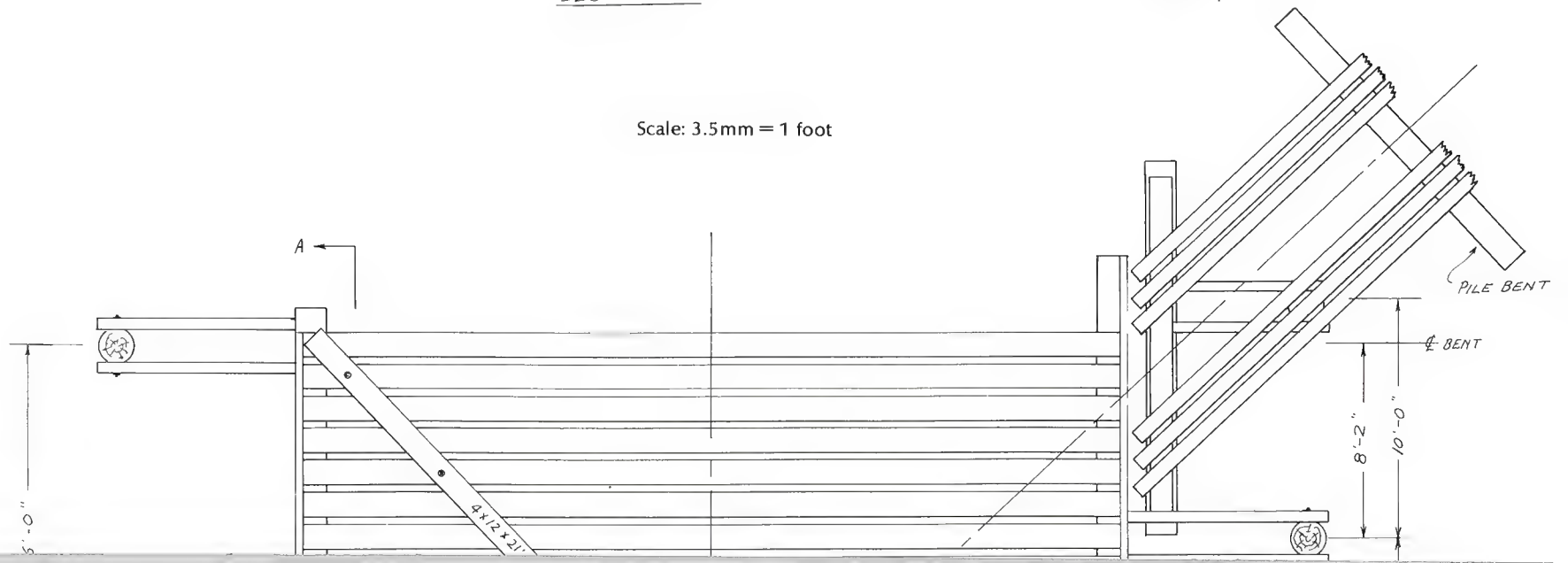
HAMMOND & LITTLE RIVER REDWOOD COMPANY • HIGHWAY OVERCROSSING, CRANNELL, CALIFORNIA

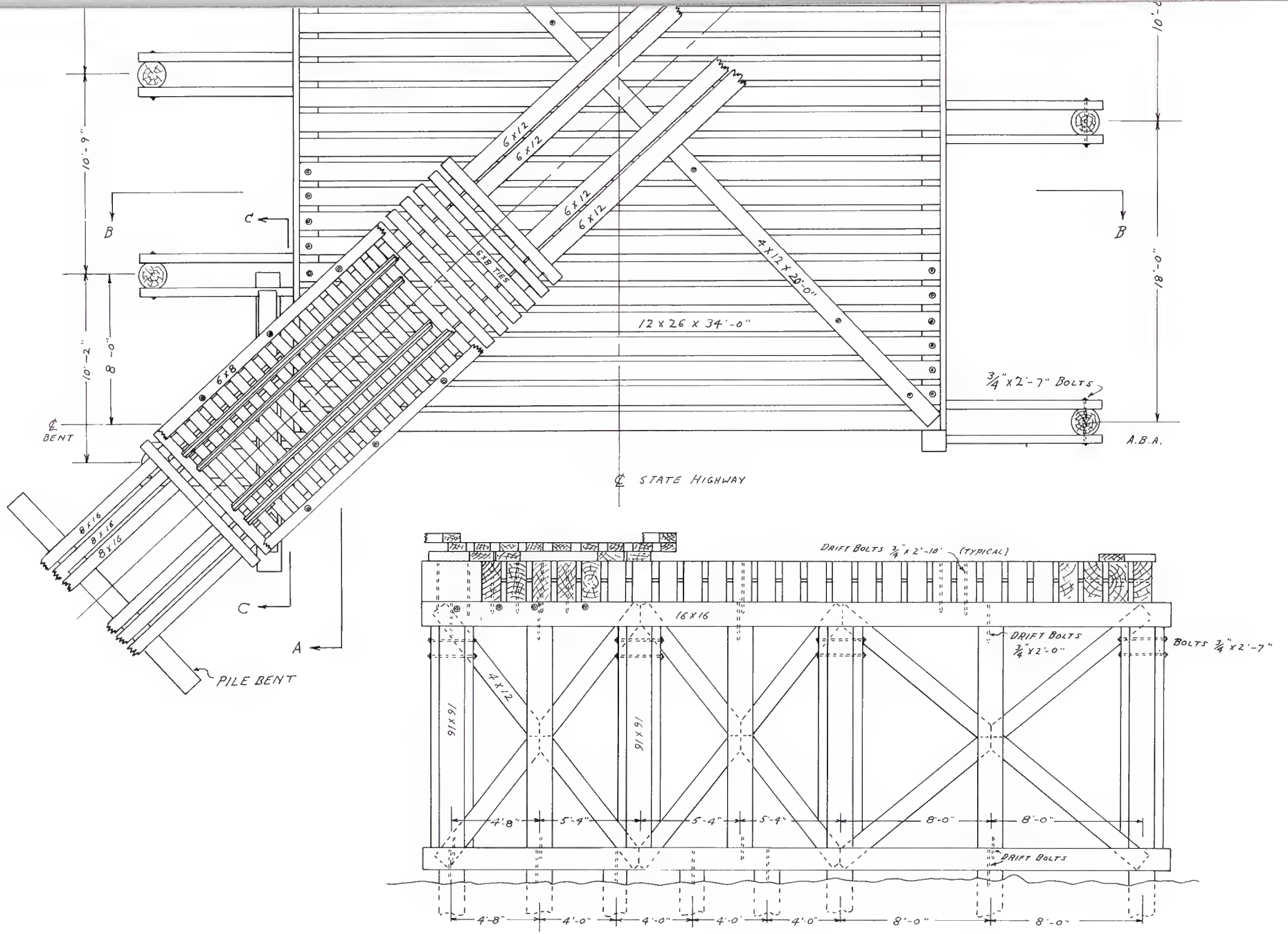
HAMMOND & LITTLE RIVER REDWOOD COMPANY • HIGHWAY OVERCROSSING, CRANNELL, CALIFORNIA



SECT B-B

Scale: 3.5mm = 1 foot




10'-9"
10'-2"
8'-0"
B
C
6x12
6x12
6x12
6x12
6x8 TIES
4x12x20'-0"
12x26x34'-0"
6x8
℄ BENT
8x16
8x16
8x16
C
A
PILE BENT
B
10'-0"
18'-0"
3/4"x2'-7" BOLTS
A.B.A.
℄ STATE HIGHWAY
DRIFT BOLTS 3/4"x2'-10" (TYPICAL)
16x16
DRIFT BOLTS 3/4"x2'-0"
BOLTS 3/4"x2'-7"
4x12
16x16
16x16
4'-8"
5'-4"
5'-4"
5'-4"
8'-0"
8'-0"
DRIFT BOLTS
4'-8"
4'-0"
4'-0"
4'-0"
4'-0"
8'-0"
8'-0"

SECT. A-A

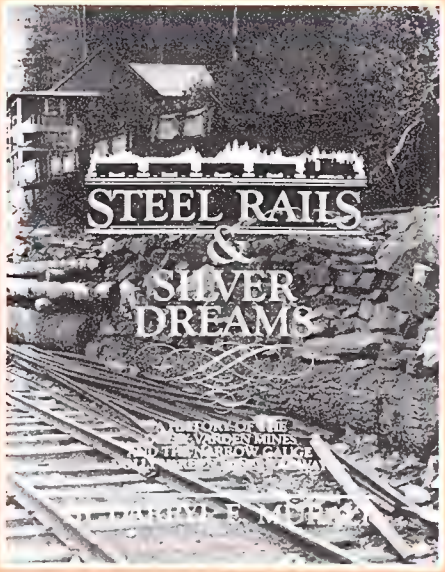
READ ALL ABOUT IT —

DOLLY VARDEN EXPOSED!

Steel Rails and Silver Dreams is the true story of one small part of the mining history of British Columbia – the Dolly Varden Mines and the little narrow gauge railway that served them. Located north of Prince Rupert near the Alaska-Canada border, the Dolly Varden Mines Railway ran inland from a picturesque wharf at the town of Alice Arm along a shelf laboriously blasted from the canyon of the Kitsault River to one of the richest silver finds in Canadian history.

The Dolly Varden story started with a prospector's prophetic dream and eventually reverberated through centers of the mining world in Chicago, New York, Vancouver, and Victoria. The fame resulting from the richness of the Dolly Varden silver ores was overshadowed by stories of scandal, speculation, bankruptcy, and legal complications. The story follows events in the Alice Arm area on through a brief flurry of logging prosperity, and years of low level mining to the present day when, still under private ownership, a hoard of silver waits at the head of Kitsault Canyon.

Steel Rails and Silver Dreams was written for the general reader and all those who enjoy a good story and a look into the past will appreciate it. The Dolly Varden story will appeal particularly to those who are interested in the history of British Columbia, in economic history, in mining, or in railways. *Steel Rails and Silver Dreams* is a beautiful and fitting tribute to the speculators, miners, and ordinary citizens who played out their rolls in this little known chapter of British Columbian history. It will be a welcome addition to the collections of those who relish fine books.



ORDER FORM

Please send me one copy of *Steel Rails & Silver Dreams.*

Name _____

Street Address _____

City/State/Zip _____

I have enclosed $35.95 in U.S. funds (postpaid in U.S.A.)
(CA residents add $2.51 sales tax)
Send this order form with your payment to:

BENCHMARK PUBLICATIONS • P.O. BOX 26 • LOS ALTOS, CALIFORNIA 94023

NARROW GAUGE AND SHORT LINE GAZETTE

PAST, PRESENT & FUTURE...

Just fill in the appropriate blanks, check the items you want, and enclose this form with your check or money order **(U.S. funds only, please)** in an envelope addressed to: BENCHMARK PUBLICATIONS, P.O. BOX 26, LOS ALTOS, CA 94023.

☐ ***Steel Rails & Silver Dreams***
($35.95 – CA residents add $2.51 sales tax)

GAZETTE

(1 year, 6 issues: U.S. – $18.00
Foreign – and Canada – $25.00)

☐ **New Subscription**

☐ **Renewal Subscription**

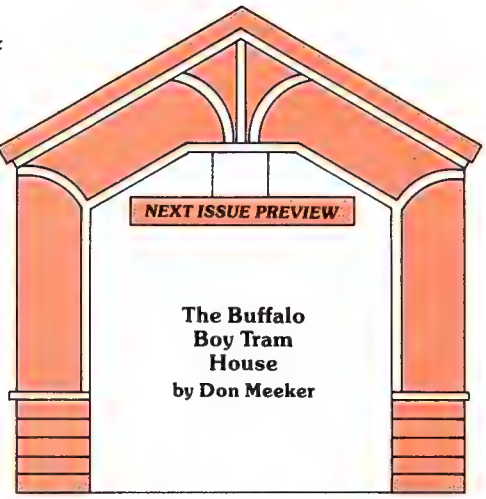
☐ **Back Issues** (Specify below)
(Before Jan/Feb 1985: U.S. – $2.75 ea., Foreign – $3.00 ea. Jan/Feb 1985 on: U.S. – $3.25, Foreign – $3.50). Allow 4 weeks delivery in U.S.A.

NAME

ADDRESS

CITY STATE ZIP

My check or money order (in U.S. funds) for $_____ is enclosed.



BACK ISSUES:

☐ **MARCH/APRIL 1980**
☐ **JULY/AUGUST 1980**
☐ **SEPT/OCT 1980**
☐ **NOV/DEC 1980**
☐ **JAN/FEB 1981**
☐ **MARCH/APRIL 1981**
☐ **MAY/JUNE 1981**
☐ **JULY/AUGUST 1981**
☐ **SEPT/OCT 1981**
☐ **NOV/DEC 1981**
☐ **JAN/FEB 1982**
☐ **MARCH/APRIL 1982**
☐ **MAY/JUNE 1982**
☐ **JULY/AUGUST 1982**

☐ **MARCH/APRIL 1982** – Pilar Point Marine Railway, Turning a Smoke Stack, Track, Track, Track, Scratch-Building Wooden Passenger Cars, A Small Anthracite Slope Mine, A One Man Sawmill, V&T Passenger Car Shed, Virginia City, Nusbaum Chemical Co. Heisler.

☐ **MAY/JUNE 1982** – Rails Through the Sugar Cane, The Rail Line Box Car, Box Cars of the WW&F, The Innovative Joe Works, The Mighty Marion OQ, V&T Virginia City Freight Station, Forks Creek Pump House and Tools Shed, Machinery Details for a One Man Sawmill.

☐ **JULY/AUGUST 1982** – Painting and Weathering Styrene, an English Garden Railway, Riding the Goose, The International Rwys. of Central America, Colorado & Southern Reefers, Building D&RGW OV in HOn3, Building a Vintage Tractor, Build a Coal Conveyor, Converting HOn2½ Turnouts to HOn3, Artwork for Decals, Sumpter Valley #50.

☐ **SEPTEMBER/OCTOBER 1982** – A Low Cost 2-8-2 in HOn30, The Garden Railway, The Mt. Tamalpais & Muir Woods, Onboard as Used by the Lake Tahoe Ry. & Navigation Co., Building a Desk Top Layout, Tonopah Railroad 2-6-0 #1, V&T Virginia City, Turntable, Car Shop, and Yard Layout, Quincy & Torch Lake Gondola.

☐ **NOVEMBER/DECEMBER 1982** – The Glenwood and Black Creek, The Hancock & Calumet, The Original Central City Depot, The Argo Tunnel, A Portable Loading Ramp, The Huntsville & Lake of Bays Railway, Central City, Colorado Yard, Little River Lumber Co. 4-6-2, Shoshone Depot, V&T, Virginia City Roundhouse.

☐ **JANUARY/FEBRUARY 1983** – West Side Lumber Co., Heisler #2, Part 1, Gas Mechanicals, Eureka: a Ghost Town, Black Hills & Ft. Pierre, Part 1, Argo Tunnel: the Model, Shopping My T-12, The Central City Section House, Pilings, A One Room Schoolhouse, A Branch Line Ash Pit, The Songo River Bridge, V&T Brill Coaches #11-12.

☐ **MARCH/APRIL 1983** – Three Inexpensive Diesel Conversions, Colorado & Southern 'Coal Cars', Dynatrol, Colorado Aspens, The Southern Pacific Narrow Gauge, A Small Oil Facility, Central City, Colorado Buildings, The Argo Tunnel, V&T Brill Coach Interior Detail.

☐ **MAY/JUNE 1983** – Freight Operations on the NPC, Smelters, Baldwins in the Trenches, A Tour through Little Helen Mill, The Idaho Springs Depot, Work Room Efficiency, Central City Industries, A Small Sanding Facility.

☐ **JULY/AUGUST 1983** – The Mill on Trout Creek, The Keystone Copper Mine Work Motor, The Colorado and Southern, The DSP&P Facilities at Alpine, Installing Sound in the Grandt Porter, Logging in Oklahoma, 16mm Railcar, Central City, Alley Views of Idaho Springs, F&CC Caboose, V&T Gold Hill Station, A Branch Line Coaling Station.

☐ **SEPTEMBER/OCTOBER 1983** – The Lawndale Dummy, Military Light Railways of the U.S. Army, Building an On3 Portable Air Compressor, Lumber Transfers, Railroad Right-of-Way Signs, A Baldwin Three-Foot Gauge 0-4-0T, V&T Reno Yard and Water Tank, Alpine Station, Privy, and Storage Shed, The Corner Repair Shop in Idaho Springs.

☐ **NOVEMBER/DECEMBER 1983** – The Pacific Coast Railway, A Vintage Turntable, Positive Turnout Control, Modeling in Nn3, Brick Row of Businesses in Idaho Springs, Oklahoma Gold (oil wells), Lawndale #5, The Yorke Pool Hall Bordello, V&T Reno Enginehouse, A Stiff Leg Derrick.

☐ **JANUARY/FEBRUARY 1984** – F. H. Stoltze Land & Lumber Co. in On3, German Military Rwys. in W. W. II, Lettering the Colorado Lines, The Kiso Forest Rwy., C&S Coal Cars, An HO McGiffert, A Poorman's K-27, Building a Vertical Boiler, Colorado & Northwestern 2-8-0, V&T Minden, NV Station.

☐ **MARCH/APRIL 1984** – The Thunder Lake Narrow Gauge, German Military Railways of World War II, Momentary Contact Sound Cam, Compressed Air Locomotives, Notes on Lettering the Colorado Lines, The Case for a Small Space, The Chooch Country Store, Thunder Lake Narrow Gauge 2-8-0 #9, South Pacific Coast Agnew Freight Station, V&T Construction Car #6.

☐ **MAY/JUNE 1984** – Low Cost Disconnects, C&S/RGS Stock Cars, Colorado in 1939, Mamod Kit, Paul Scoles on Scenery, Scratchbuilding a Willamette Hoist Engine, Lighting Your Caboose, Timber Over-Bridge, Ore Processing Part 1, Durlin Branch of the D&RGW, Archbar Trucks, V&T Carson City, Nevada Track Plans, Northwestern Pacific 4-4-0 #91.

☐ **JULY/AUGUST 1984** – Sawmill Chronicles, Part 1, Modifying the Grandt Line Porter, Head End Signals, Ore Processing, Part 2, Camp Eight, Flumes, Paul Scoles on Scenery, Detailing the Flying Zoo Climax, The Georgetown Loop, Scratchbuilding an F&CC Caboose, An 18-ton Climax Plan, The Idaho Springs Machine Works.

☐ **SEPTEMBER/OCTOBER 1984** – An ET&WNC Caboose, Realistic Hay Bales, Realism with Pastel Pencils, EBT Hoppers, The Station Agent, An On30 4-6-0, Ore Processing, Part 3, The Sawmill Chronicles, Part 2, A Skewed Kingpost Bridge, EBT Rockhill Sandhouse, EBT Mt. Union Enginehouse.

☐ **NOVEMBER/DECEMBER 1984** – Scratch-building an ET&WNC Hopper Car, Creating a Specific Time Period Using Photo Backdrops, The Shoshoni (a boat), a Wells Fargo Concord Coach in HO, The Idaho Springs Water Tank, The Colorado Railroad Museum, Logging Scenery.

☐ **JANUARY/FEBRUARY 1985** - C&S ½ inch Scale Mogul, The Georgetown Loop Opened, Ruth Mining Locomotives, Scratch-building an ET&WNC Boxcar, Building the On3 Durango Press Flanger 01, Saw Filers Shack, F&CC 2-8-0, 18 Ton Climax.

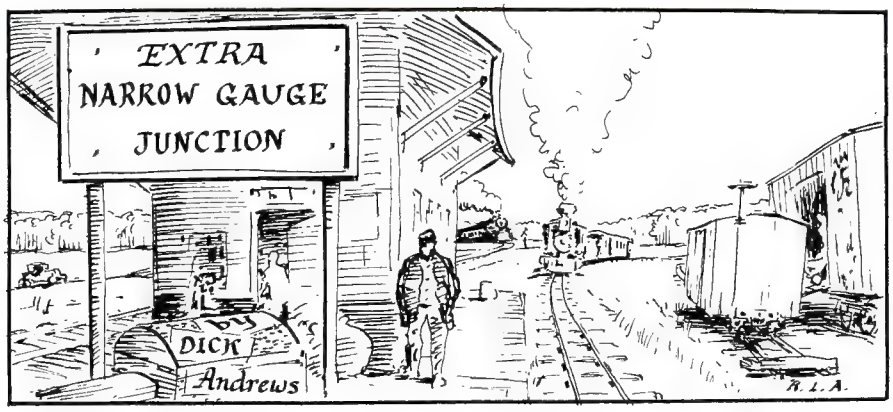
☐ **MARCH/APRIL 1985** - The Scotch Girl Hoist House, An LGB RGS Line, Forty-Foot Log Cars in West Virginia, The C&S Cabooses, Wood Detailing an On3 Precision Porter 0-4-0, A Fire Fighting Car, An ET&WNC Gondola, V&T Miners Caboose #10.

☐ **MAY/JUNE 1985** – Building #492 in On3, Operations on the Waynesburg & Washington, Merced on the Yosemite Valley, D&RGW #491 in Nn3, Building Ore Bins, A Truss Rd. Bridge, Placemat Shingles, ½ Inch Scale Rolling Stock, The Edger, Carson City, Nevada, Passenger Station, Louisiana & NorthWest 4-6-0 #23 and Caboose, D&RGW Stock Car.

☐ **JULY/AUGUST 1985** – The Saint Clair Engine House in On3, SPNG #12 in HOn3, HO Gauge Yosemite Valley Bulkhead Log Cars, An Inexpensive HO Logging Mallet, Perspective Scenery, Prototype Gravity Stamps, The Marion Mine Tram, The Hukill Mine Head, Log Deck Hardware, Carson & Colorado Flat Car, Kentwood & Eastern 2-6-0, V&T Carson City Passenger Depot.

☐ **SEPTEMBER/OCTOBER 1985** – A Derelict Store in ½-inch Scale, Making Sound Cams Quickly, Easily and Inexpensively, The Sonora, CA Sierra Ry. Station, On30 Combines, a Log Haul, the Stanley Mine Complex near Idaho Springs, Camp 1 and Vicinity, an Unusual Water Tank, Porters on the Maine 2-Footers, the Truckee Jail, Collins & Garrison Shay #349, V&T Carson City Enginehouse.

☐ **NOVEMBER/DECEMBER 1985** – Trackside Signs for Your Railroad, An On3 Freelanced Speeder, The On2 Saco River Railroad, A Model T Railcar in ½-inch Scale, The HOn30 Kingfield, Twinlakes & Maine Railroad, An HOn30 Q&TL Rock Car from a D&RGW Gondola, The Everett & Monte Cristo, Mr. Wilfley and his Tables, a 7-foot Gauge Pole Road Locomotive and Car, The Kahuka, Argent Lumber Co. #5.



by Dick Andrews

In 1871, General William Palmer, founder and first president of the Denver and Rio Grande Railway, began his planned march to Mexico from Denver, unrolling behind him as he went a pair of 30- to 35-lb. rails set to 3-foot gauge. In three months he had reached Colorado Springs, and a year later, Pueblo, Colorado. During that time the D&RG earnings were reported at a very favorable ratio to its expenses. Part of the reason for this condition lay in the reduced expense of building a narrow gauge railroad as compared to a standard gauge line.

Many early day standard gauge lines soon went bankrupt because their earnings could not match the cost of building them. At half the cost per mile they might have succeeded. Thus there followed a world-wide "boom" in building narrow gauge public railroads and in light narrow gauge construction. In some ways the history of narrow gauge is the history of the favorable economies of light locomotives on light track.

A key measure of whether a railroad is light or heavy is the load on the axles of its locomotives – in other words, how much weight there is on any axle. This weight was easily figured on such locomotives as the Union Pacific's 4-4-0 SEMINOLE delivered by the Rogers Locomotive Works in 1867. She weighed 31 tons, less the tender. Twenty-one tons of this weight was on the drivers, so the maximum unit axle load (weight on each axle) was 10½ tons. Rail had to be chosen that was not too light to take this weight. The table shows 40 lb. rail suitable for 22,000-lb. axle loads so the Union Pacific could have safely laid 40-lb. per yard rail for the SEMINOLE.

General Palmer ordered some 12-ton 2-4-0's from Baldwin for passenger work on his 3-foot line. He also ordered some Baldwin 2-6-0 Moguls for freight service. Assuming two tons on the pony trucks on both engines, we can get a five-ton maximum unit axle loading for each engine. This is just half the weight on the hoof of the SEMINOLE.

Many early narrow gauge lines were built following the designs set up by Palmer. The Peachbottom Railroad of Pennsylvania gently tread on 30-lb. rails. The Toledo & Maumee line in Ohio tread even lighter on 25-lb. iron. The Havana, Rantoul & Eastern, in Illinois, ran on 30-lb. rails for 75 miles of near-level and straight track. Most early narrow gauge lines in the United States were just as light as those mentioned. Some exceptions were such heavily trafficked coal roads as the East Broad Top and the Pittsburgh & Castle Shannon which used 50- to 60-lb. rail. However, most standard gauge coal roads were also built heavier than regular standard gauge railroads.

The trend to minimize costs with the lightest rail possible for the loads continued out on the prairies. Out there where spirit was strong even when cash was short, a pike like the Iowa Eastern struggled on and added a few miles of wooden-railed track onto several miles of track laid with 30- and 35-lb. iron. "Iron", by the way, is a romantic term for what was generally steel for rails, but iron rail was actually used, here and there. The pioneer 2-foot gauge public railroad, the Billerica & Bedford, was laid with 25-lb. iron in 1876. In 1879 this iron rail was sent to Maine for use on the Sandy River and some of it was still in use many years later. Cast iron was treacherous in cold weather but had some fine qualities, even if it was heavy for its strength. Old ships made out of cast iron plates have in a few cases survived in surprisingly good shape and steel often seems to rust much more easily than iron.

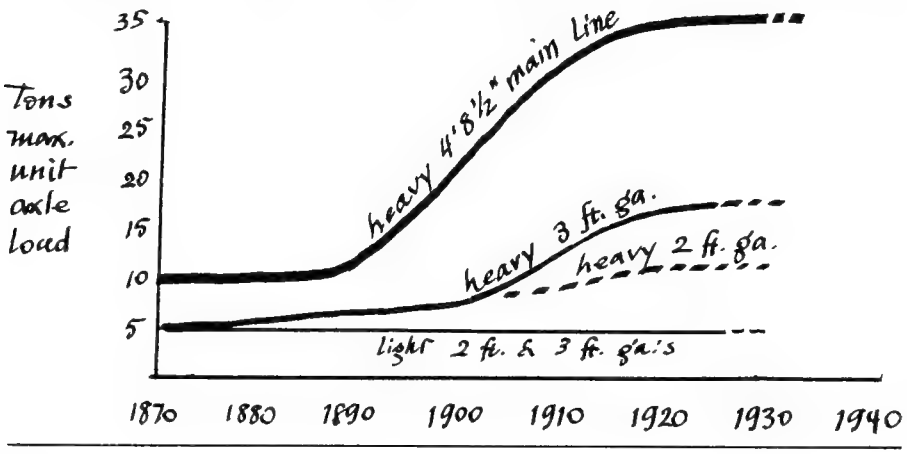
In the 1890s with the advent of the "heavy steam" era, it was no longer possible to build a narrow gauge line costing anywhere near half as much as a similarly located standard gauge line. Both standard gauge and narrow gauge engines began to get heftier in this period. If a narrow gauge pike laid with 30-lb. steel was one-half as "heavy" as a comparable standard gauge line in the 1870s or 1880s, it did not remain so in the 1890s. Locomotive weights and their maximum unit axle loads began to jump up and up.

An 1899 Schenectady-built Chicago & North Western 4-4-0 weighed 68 tons with an axle unit load of some 21.8 tons – a big jump from SEMINOLE. A Manchester 2-6-0 of 1900 built for the Boston & Maine had a similar unit axle load. An Erie 2-8-0 of 1904 "hoofed it" at a 22-ton unit axle load. And by the time of World War I and the development of the standard stock designs

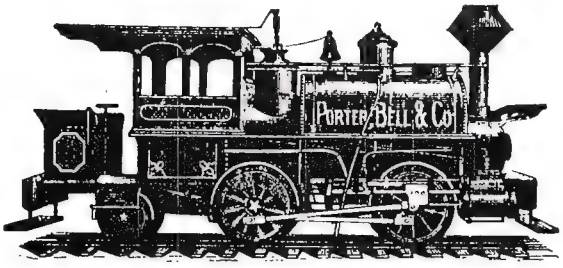
THE WEIGHT OF RAIL NEEDED FOR DIFFERENT AXLE LOADS*

Weight of rail per yard (lbs.)	Greatest weight of locomotive per axle, in lbs.	in tons
12	4,000	2.0
16	6,400	3.2
20	9,000	4.5
25	11,400	5.7
30	15,000	7.5
35	18,000	9.0
40	22,000	11.0
45	25,000	12.5
50	33,000	16.5
60	38,000	19.0
65	40,000	20.0
70	44,000	22.0
75	48,000	24.0
80	52,000	26.0
85	57,000	28.5
90	62,000	31.0
95	66,000	33.0
100	72,000	36.0

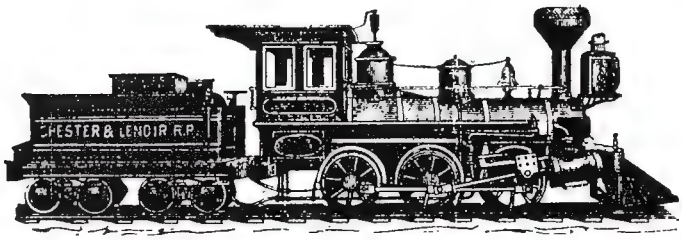
*Modified from the H.K. Porter Company *Catalogue of Steam Locomotives*, 13th edition, circa 1920.



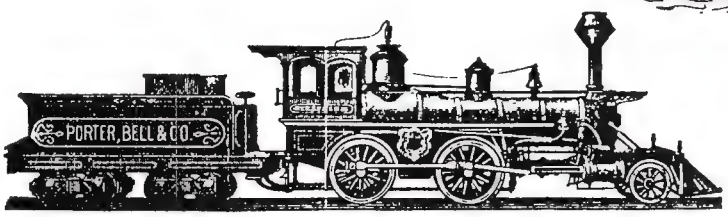
PORTER, BELL & CO. OF PITTSBURGH, PENN.



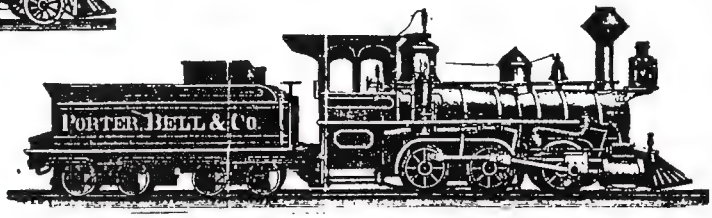
Light passenger engine for 25 or 30 lb. rail.



Light freight engine for 25 or 30 lb. rail.

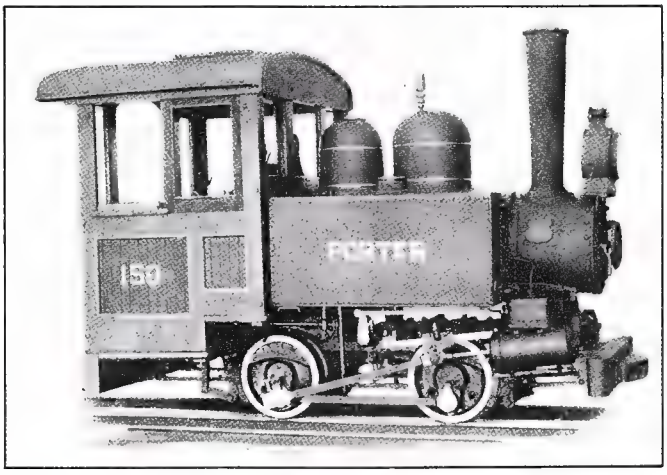


Through passenger engine for 35 or 40 lb. rail.

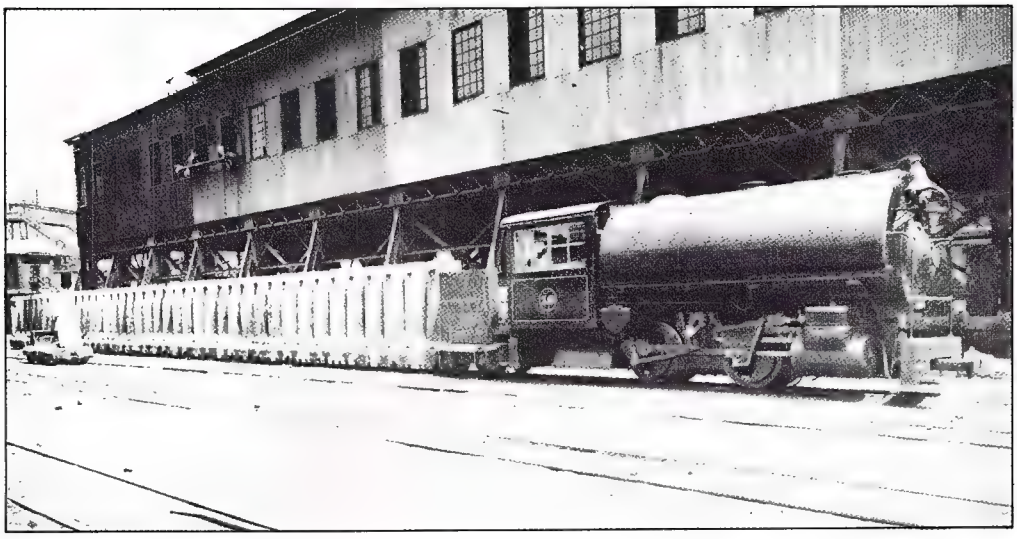


Heavy freight engine for 35 lb. rail.

Four Porter locomotives of the 1870s that were built to operate on very light rail. The light freight engine ran on the Chester & Lenoir RR, a 109-mile long, 3-foot gauge line operating in both North and South Carolina. It was standard-gauged in 1902. *Print, collection of Dick Andrews.*



This delightful little locomotive has 18-inch diameter disc drivers and could lope along on 16-lb. rail. Her wheelbase was 10 feet, 3 inches and she stood 8 feet high to the top of her smokestack. Weighing only five and one-half tons, she could go around a 15-foot radius curve. This photo is from the 13th edition of the Porter Catalogue. *Collection of Dick Andrews.*



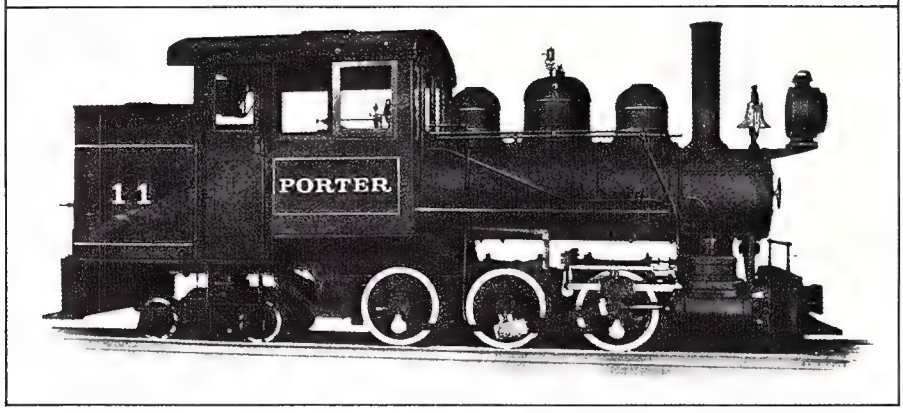
A real heavyweight. This 30-inch gauge, 49-ton steelworks locomotive was not light on her feet but she could waltz around some very sharp curves pulling hot ingots in a steel mill. *Photo, collection of Dick Andrews.*

of the U.S. Railroad Administration (USRA), an 0-6-0 switcher built for terminal switching was 27.1 tons, a heavy 2-10-2 was 29.3 tons, and a heavy 4-8-2 had a unit axle load of 30.1 tons. At this time the Baltimore & Ohio had its 60-ton Dockside switchers on the Baltimore docks. They had a unit axle load of 30 tons.

Past this weight loadings did not climb so quickly, but loadings up to 36 tons could be found on several heavy mainlines around the country. This seemed to have been the generally recognized limit. An Alco, New York Central 2-8-4 had a 35-ton load in 1948 and a NYC 4-8-4 had a 34.4-ton load. The Chesapeake & Ohio hit 42 tons with a Lima-built 2-6-6-6 in 1947. The same road had a Baldwin-built 2-6-6-2 in 1949 with a 30.5-ton load that proved to be the last such steam locomotive built in the U.S.A.

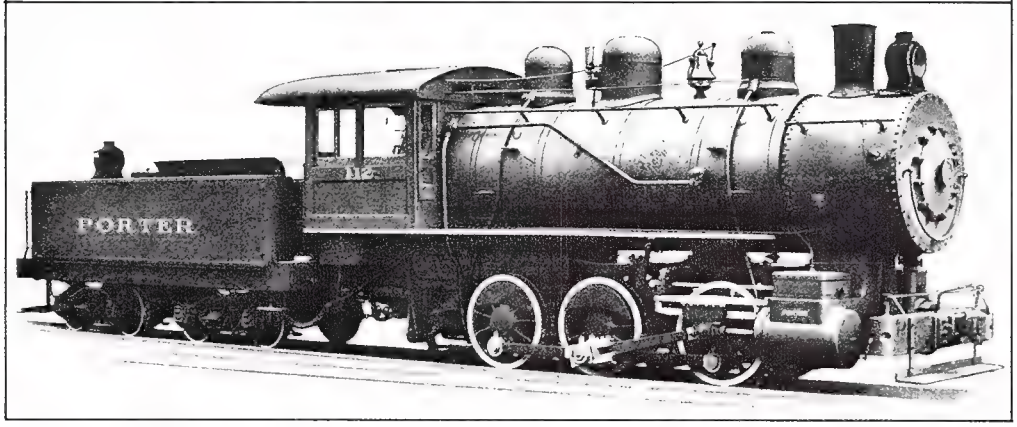
Steel rail of at least 100 pounds per yard is needed for such heavy engines and that

PORTER STEAM LOCOMOTIVES



A six-coupled locomotive cost more money than an 0-4-0 because of the extra wheels, but the extra pair of drivers lightened the unit axle load on the track. This 3-foot gauge Louisiana plantation Forney could run on 20-lb. steel with her four-ton unit axle load and run around a 70-foot radius. *Photo, collection of Dick Andrews.*

PORTER STEAM LOCOMOTIVES



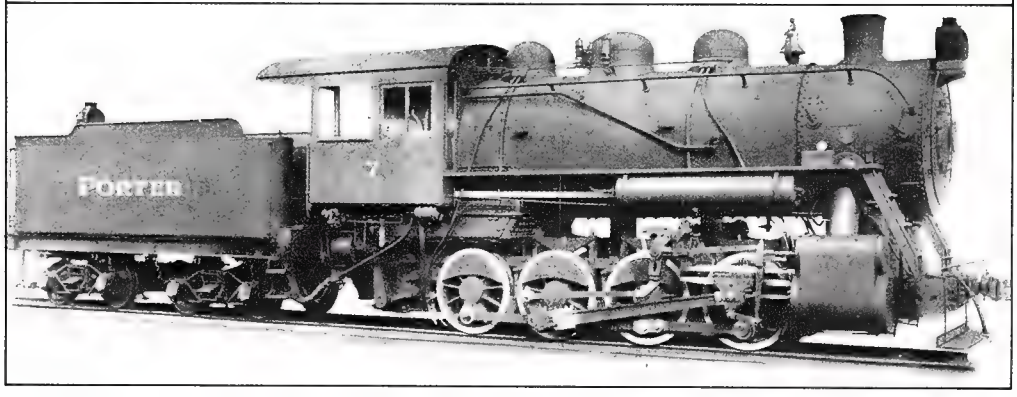
This chunky terminal switcher by Porter had 50-inch drivers, an 11-foot engine wheelbase, ran on 85-lb. rail and could go around a 140-foot radius. She had a 25-ton unit axle load. *Photo, collection of Dick Andrews.*

is a minimal weight. Rail heavier than that as well as excellent ballasting and maintenance is needed for heavy traffic volume and speed at such high unit axle loads. The "Pennsy" even laid some legendary 152-lb. per yard rail.

Not all standard gauge lines were "heavy." Logging railroads used a variety of light rod and geared locomotives. Several retired 0-4-4T's from the New York City and Chicago electrified lines ran very successfully on light track. New York El's #45, an 1890 Rhode Island product, weighed no more than 20 tons. She was the same size as Sandy River's #6. Number 45's unit axle loading was but seven tons. Hammond Lumber Company's #6, a 1929 Baldwin 2-6-6-2T articulated tank engine weighed 110 tons but had an unit axle loading of just under 15 tons.

What happened to the narrow gauge lines that survived into this "heavy" steam era? They started getting heavier. Soon even General Palmer's "light" line was replacing the five-ton unit axle load 2-6-0's with 2-8-0's and 2-8-2's with up to 14 tons on each axle. Although General Palmer's D&RG never did reach Mexico, in its early days it laid light rails into many parks, valleys and passes in the Rocky Mountains, but the tiny Moguls running there in the 1870s were first displaced by 30-ton 2-8-0's and then by even heavier 2-8-2's. The

PORTER STEAM LOCOMOTIVES



This chesty eight-wheeled switcher weighed 95 tons with a unit axle load of 23¼ tons. *Photo, collection of Dick Andrews.*

2-8-0's were an ingenious design using standard-sized, four-foot diameter, standard gauge boilers that had their fireboxes curved in and stretched out to fit between the frames of a narrow gauge engine. Even using these engines, the D&RGW found it necessary to continue double and triple heading tiny drags. As crew wages climbed, management began to think of real power. The K-class 2-8-2's were then built as an economy measure. In 1923 Alco built D&RGW #470, weighing in at 78 tons less the tender. The weight on her drivers was 56¾ tons, or slightly over 14 tons per axle. An engine running on this unit axle weight could get by on 50-lb. rails.

A steel mill hot metal tramline is the archetype of heavy narrow gauge. (The film *Flashdance* had some shots of a hot metal tram in a mill yard.) The heavy and hard-running hot metal cars often get pulled around the very sharp curves made to fit in a steel mill. The narrower the gauge, the less difference in lengths of the inner and outer running rails on sharp curves and consequently the less drag. A 50-ton 0-4-0T built by Porter once ran on a 30-inch gauge steel mill tramline. Her unit axle load was 25 tons – heavy narrow gauge indeed.

But many narrow gauge industrial trams were not as heavy as the steel mill hot metal trams. And some narrow gauge plantation lines were downright ultra-light. Little locomotives used in Louisiana and Hawaii included tiny Moguls, four-coupled Forneys, an 0-6-4T and even some tiny 0-4-0's with separate tenders.

In spite of the obvious economies of narrow gauge construction, I used to read now and then that American narrow gauge was only justified where a rail line had to run through a narrow and twisty canyon to reach some mine camp. True, most 3-foot lines were converted to standard gauge when the time and money became available to make the change. But the long and profitable careers of the Maine 2-foot gauge railroads suggests another reality. The fat profits of the Bridgton & Saco River through 1924 suggests that the cost of transferring freight and passengers from narrow to standard gauge was a much lighter burden than servicing the debt that would have been created in converting the line to standard gauge. The Bridgton and Sandy River lines did re-lay their mainlines with heavier steel and ran fairly hefty locomotives on these lines. Oddly enough, the relaid portion of both roads amounted to pretty much the same mileage in each case. The Bridgton's line was about 16 miles long and the Sandy River's was 18. Rail weight of around 50 lbs. was used. The difference was that the Bridgton's only branch to Harrison had five miles of 35-lb. rail and no light bridges. The Sandy River had some 80 miles of branches over which their 32-ton Prairie #32 could not go. Even their #10 2-4-4T was limited. Perhaps this had as much to do with the bridges as the rails because at least two bridges came down under even lighter locomotives on those branches.

Another example of the success of narrow gauge was the little 6-mile-long, 2-foot Monson Railroad that outlasted the other 2-foot lines with its 35-lb. steel, stub turnouts and other antiquities. The line never had overload problems because it replaced its first pair of 15-ton Forneys with another pair of brand new Vulcans that were no heavier. Thus the maximum unit axle load of barely more than five tons was kept for 60 years.

An excellent picture of the creation of a narrow gauge railroad under difficult circumstances, detailing actual costs of rail and other items laid, is given in the delightful new book, *Steel Rails and Silver Dreams* by Darryl Muralt, published (like the **GAZETTE**) by Benchmark Publications. It is also, by the way, one of the most handsome railroad books I have seen in a long time. There is fine material for modeling as well, with photos and plans. Happily, the discoverer of the silver that prompted the railroad got his money out of it, and settled right there and made some fine photos of the little road in action.

The Washington & Plymouth Railroad's charming 4-4-2 that appeared in my column in the last issue ran on a 33-mile-long line in coastal North Carolina. The engine was built as a 3-footer in 1902 and was bought by the Norfolk Southern system in 1904. She was standard-gauged the next year. Ted Collins has a fine, scale drawing of this engine. Write to him at Trexler Ave., Box 58, Kutztown, PA 19530.

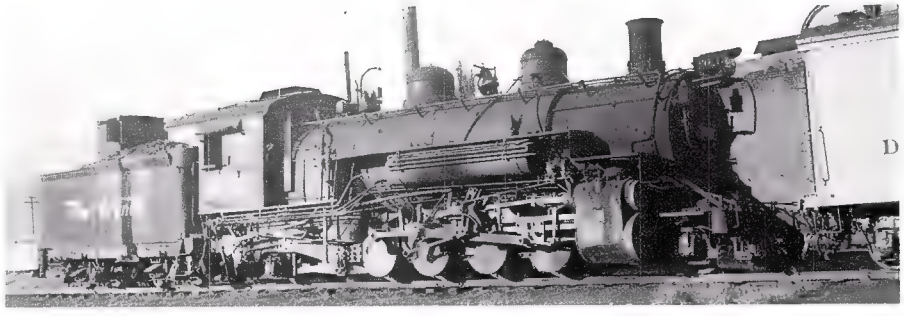
Vincent Ryan, who recently passed away in Oakland, California, was one of the original small group of modelers who got On3 established "simply" by building locomotives and cars from scratch and running them on scale track. A fine and careful craftsman, Vince worked in standard O gauge as well, and also O scale traction and showed us how to make O and On3 dual gauge, so that each did not affect the other. Much of our information on the Monson Railroad and other pikes was due to trips Vince made to record them. For years he was a resident of the Buffalo, New York area before Cliff Grandt lured him to California to handle exhibit work for the Lawrence Hall of Science at Berkeley. We will miss him very much.

Well I know: last time I promised you material on that ghost trestle in the middle of New Hampshire. Sorry I couldn't get it ready by deadline. I'll have it for you next time I hope.

Dick

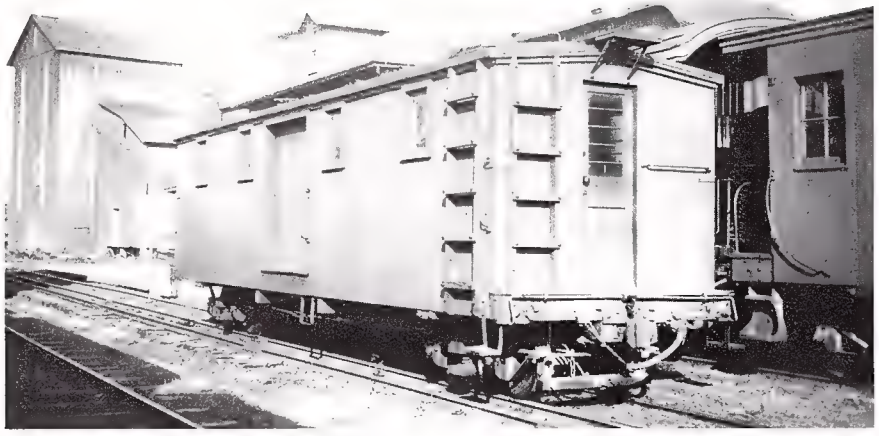
Denver & Rio Grande 3-foot gauge #315 had a 4-foot diameter boiler with a firebox between the frames. *Photo by Lawrence Reid.*

By mounting the boiler of an old standard gauge Denver & Rio Grande Western engine on six narrow gauge axles, the D&RGW created one of the best examples of heavy narrow gauge motive power. *Photo by Lawrence Reid.*



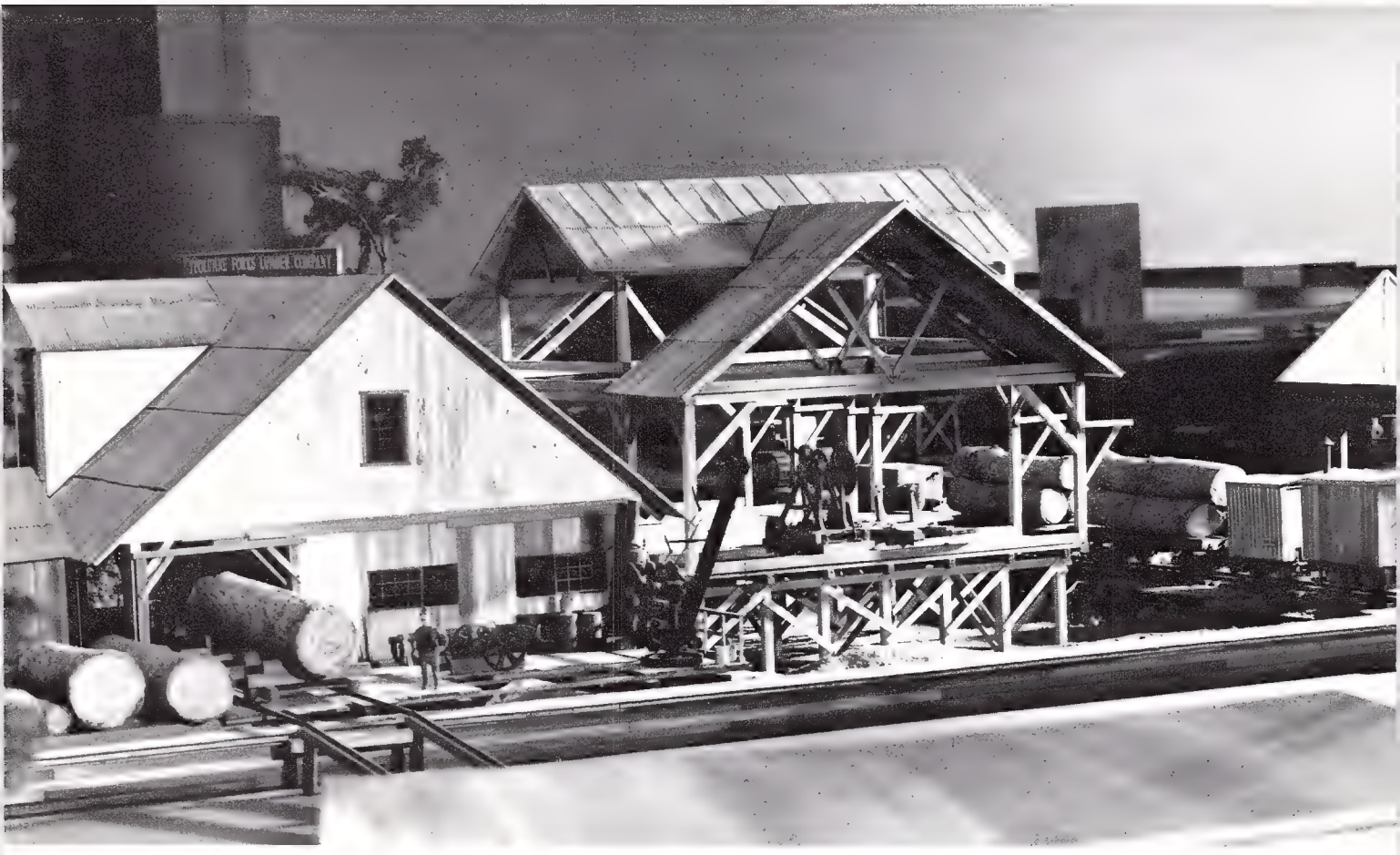
GAZETTE GALLERY

Edited by Gene Deimling



This interesting car ran on the 3-foot gauge Newport and Sherman's Valley Railroad. She was photographed in the yards at New Bloomfield, Pennsylvania, in 1932. *Photo, collection of Bob Brown.*

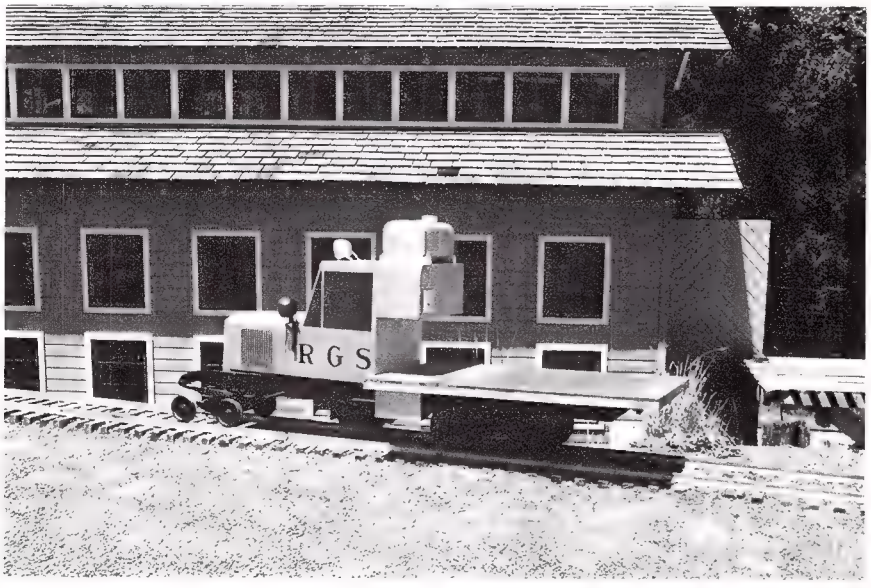
This sawmill is under construction on **GAZETTE** editor Bob Brown's On3 Tuolumne Forks Lumber Company. The mill is being equipped with C.H.B. sawmill machinery inspired by Reg Shaffer's series, "The Sawmill Chronicles." *Photo by Bob Brown.*

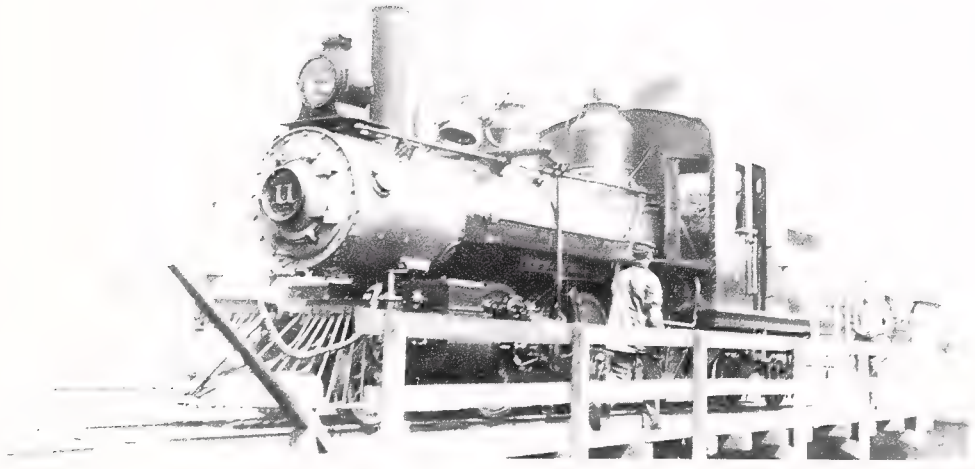


According to **GAZETTE** editor Bob Brown, the Lake Tahoe section of his On3 Tuolumne Forks layout has a long way to go before it is finished. A gasoline-loading wharf is on the far left of the scene and the Tahoe Inn just barely shows beyond the pine trees in the center of the photo. Climax #7 is just pulling into the yard on the far right. *Photo by Bob Brown.*

The Lake Tahoe waterfront on **GAZETTE** editor Bob Brown's On3 Tuolumne Forks is not complete. A marine railway on the right will be used to pull boats out of the water. The foundation on the right is for a little one-stall engine house for the engines that will do this task. *Photo by Bob Brown.*

Eric Bracher built this 2½-inch scale, 7½-inch gauge Goose #6. It uses four 24-volt can motors powered by two 12-volt automobile batteries to speed along at 12 scale mph. This photo was taken on Jack Littlefield's layout. *Photo by Eric Bracher.*

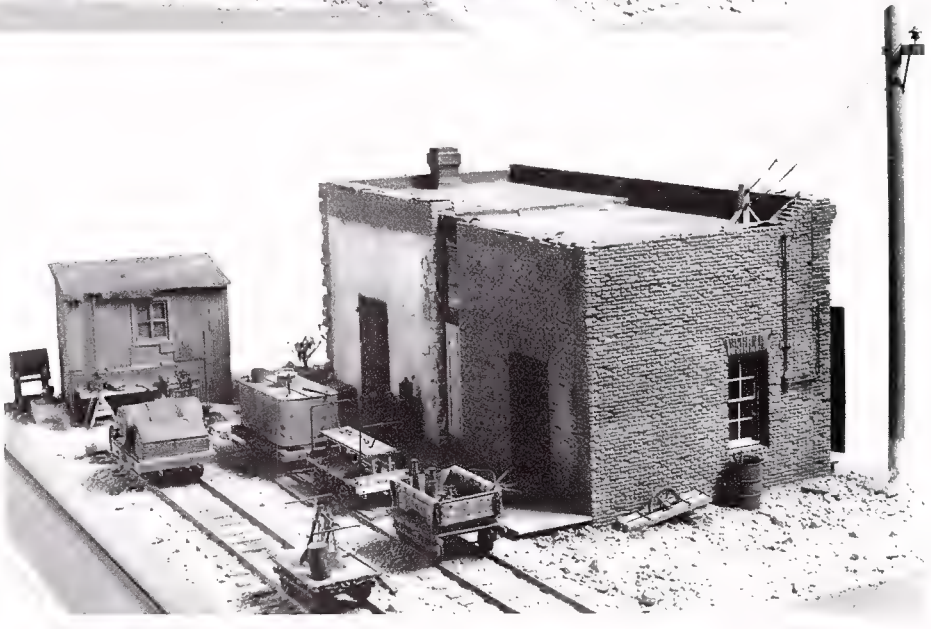




Boston, Revere Beach & Lynn #11 being turned for another commute run. The BRB&L 3-foot gauge line was electrified a number of years after this photo was taken. *Photo by Frank B. Ramsdell.*

This rare Bell geared-locomotive was found in a field near Boise, Idaho. Originally she was owned by the U.S. Government and was used to build Black Canyon Dam at Emmett, Idaho. *Photo, collection of Bob Brown.*

In the Nov/Dec 1985 **GAZETTE** we ran an article by Brian Rudko on building a free-lanced section car. Unfortunately, it was labeled a section car in error. Since the car has no engine it is obviously a trailer. Here are two more photos showing Brian's excellent modeling. The little tank car is based on a design by Tom Yorke. The building is one of Yorke's O scale Sonora Stores. Brian used this store as the main office for his Rosebud Railroad Company. *Photos by Brian Rudko.*



East Broad Top caboose #28 rests between runs in Orbisonia, Pennsylvania in 1932. *Photo, collection of Bob Brown.*

AMERICA'S LEGEND

now available on video tape

"THE DURANGO & SILVERTON NARROW GAUGE RAILROAD"

Price: $49.95 plus $2.50 postage & handling (Colo. residents add 3% sales tax)

An unforgettable 24-minute Color Video of this historic ride through the spectacular San Juan Mountains of Southwestern Colorado - narrated by C.W. McCall

To Order: Mail this form with payment to:
MPR Advertising, Inc. - Dept. G
P.O. Box J, Durango, Colorado 81301
Allow 4-6 weeks for delivery

I am enclosing $52.45 (plus 3% Colo. Sales Tax, if applicable) for the Durango & Silverton Narrow Gauge Railroad 24-minute color videotape.
Please send me a ☐ VHS ☐BETA videotape.

NAME

STREET ADDRESS

CITY STATE ZIP

☐ CHECK ☐ MONEY ORDER
☐ M/C ☐ VISA ☐ AMEX

SIGNATURE

CARD # EXPIRATION DATE

Courtesy of Robert Sloan

BOOK REVIEWS

Donner Pass, Southern Pacific's Sierra Crossing, by John R. Signor, Golden West Books, P.O. Box 80250, San Marino, CA 91108. Hardcover, illus., 290 pages, $47.95.

This new book, dedicated to the late Gerald Best, is a beautiful history of the Southern Pacific's mainline over the Sierras at Donner Pass that runs from Sacramento, California to Sparks, Nevada. While it is not a narrow gauge or short line book, it may be of interest to narrow gaugers because this is the line where both the Nevada County Narrow Gauge (at Colfax) and the Lake Tahoe Railway & Transportation Company (at Truckee) 3-foot rails interchanged. There is an excellent track plan of Colfax and another one of Truckee. It is the first time I have seen a plan for the LTRY&TCo. trackage in Truckee. A large fold-out page also shows Truckee with the narrow gauge in the foreground.

The book is organized by dates, starting with the early construction and operation of the line from 1860 to 1899. Three more chapters discuss the line from 1900 to 1929, 1930 to 1955, and from 1956 to 1985. The book is full of striking photos of cab-forwards dragging trains over Donner Pass and through the great snowsheds that can still be seen from Highway 80. The construction of the unusual snowshed at Norden, complete with covered turntable and station is described. Of special interest to me was the chapter on the Lake Tahoe Railway & Transportation Company line from Truckee to Tahoe City. This branch was bought by the SP and standard-gauged in the late 1920s. (Incidentally, the company's proper name is *Transportation Company*, not *Navigation Company* as mentioned twice in this book – but I have been guilty of the same error in the **GAZETTE**.) This is a fine book full of wonderful photos and enjoyable reading that tied together the SP operations and several little narrow gauge lines for me. *Bob Brown.*

Steel Rails & Silver Dreams: A History of The Dolly Varden Mines and The Narrow Gauge Dolly Varden Mines Railway, by Darryl E. Muralt, Benchmark Publications, Ltd., P.O. Box 26, Los Altos, CA 94023. Hardcover, illus., 192 pages, $35.95.

This book will be of interest not only to the railroad historian – the mining enthusiast will also find a wealth of photos, plans, and information. Darryl Muralt has truly opened up virgin territory as he recounts the life and times of the Dolly Varden Mines and its improbable 3-foot gauge, 17-mile-long railway in a remote coastal area of British Columbia, just a stone's throw away from Southeast Alaska.

In 1915, Dolly Varden silver ore was assaying so high it was inevitable that a railroad would have to be built to haul it out of the mountains. The original contractor nearly went broke trying to push the narrow gauge line out of Alice Arm, and the ensuing legal battle saw the contractor ending up with the mine and uncompleted railroad by the summer of 1919. The short line only operated for three years, but it was a lively and colorful period, spiced with twisting trackage, unusual equipment, and as always, dreams of silver riches.

The author and publisher have done an excellent job of presenting an accurate picture of the development and operation of the mines and railway, with over 170 photos, good maps, and an excellent layout. A full-color painting of Climax #7 by Bob Schlechter serves as a frontispiece. The book's layout leads the reader through the line's history, from its first tiny Porter 0-4-0T, over 5½ percent grades to the waterfront and ore transfer docks at Alice Arm.

Author Muralt does not overlook the rolling stock of this railroad either, as he presents photos and plans drawn by Rich Dunn of the DVMR 20-ton wooden ore cars, built by the Pacific Car & Foundry Company. Dunn has also traced a Porter saddle-tank engine and made a fine drawing of Climax #7 for the book. The roster was especially interesting to me because Muralt has discovered the final history of the elusive Ferries & Cliff House Baldwin 2-4-2T that once operated in the streets of San Francisco. Previous writings and research had traced this engine only as far as Vancouver, B.C., where she was assumed to have been lost in some towering forest in the hinterlands.

As in most stories of mining glory, the Dolly Varden's rich veins of silver soon "pinched-out," and the miners moved on. The lower five miles of the railway were leased to the Granby Company as a logging line. The Granby outfit mined copper at nearby Anyox where they operated a huge smelter complex, including a 3-foot gauge electric line. The book concludes with a description of the Anyox rail operation and equipment by John Lewis.

GAZETTE readers will appreciate the same high standards of photo reproduction, a well organized format, and the quality printing they have come to expect from this publisher. Few "first books" can compare with *Steel Rails & Silver Dreams*, a most enjoyable work. *Mallory Hope Ferrell.*

The Bridgton Narrow Gauge (Bridgton & Saco River Railroad), by Edgar T. Mead, Railhead Publications, P.O. Box 526, Canton, OH 44701. Softcover, illus., 40 pages, $7.95.

This book started out as a reworking of Ed Mead's classic *Busted & Still Running* (Stephen Greene Press, 1968), a short history of the Bridgton & Saco River Railroad and its successor, Bridgton & Harrison Railway — but it is actually a new book full of new information, photos, and plans. Ed retains his delightful touch and puts us aboard a series of trains starting out from Portland's huge old Union Station for the run on Maine Central's mountain division up to Bridgton Junction. There a tiny 2-foot gauge train awaits us across the plank platform in 1914; the conductor and others fill us in on the little road's history and regale us with choice anecdotes as the engine chuffs away on the long pull out of the Saco River Valley. We get a very full picture of the various industries that the little pike served; a picture that would permit us to make a realistic switch list for operating our models. Ed carried us through the flush times to the end of easy prosperity in the late 1920s, and there the book ends, on an upbeat note. A whole new additional book will be forthcoming on the years after 1930 when the line was known as the Bridgton & Harrison Railway. *Dick Andrews.*

A History of Railways and Tramways on Tasmania's West Coast, by Lou Rae, Mercury-Walch, 5 Bowen Rd., Moonah, Tasmania, 1984. Hardcover, illus., 212 pages, $52.00 (U.S.). Also available in softcover.

This book is a complete history of the many little mining and logging lines that ran on the west coast of Tasmania. Look

at some of these names: the Burnie-Waratah Rail Link, the Strahan-Zeehan Railway and the Mt. Bischoff, Magnet and Balfour Tramways. Makes you want to learn more, doesn't it? These railway systems will delight the soul of any logging or mining fan. The railways in this book were quaint and operated with a mixture of American Baldwins and a few Shays that ran cheek-to-cheek with British and German engines. Mix this motive power with small four-wheel cars and some wonderful rail cars, followed by several wharf scenes, complete with little railway steam cranes, and you may find the railways of western Tasmania hard to resist. One of the mining railways even had a beautiful 3-foot line that operated a little four-wheeled Westinghouse electric locomotive. Also keep in mind that Tasmania had the first Beyer-Garratt locomotive. There are several photos of this little engine, now restored and on display in the Railway Museum in York, England. If your interests run to the unusual, don't miss this book. *Bob Brown.*

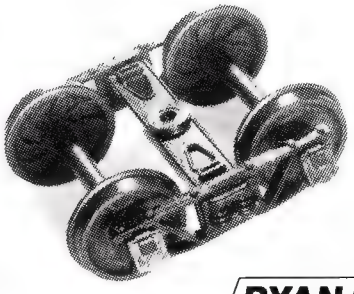
Our HO and HOn3 Handcar Sheds are available again. Includes handcar, interior detail, and other detail parts. Also look for our HO and HOn3 Rotary Snowplow.

DP-29 HOn3 Handcar Shed $14.00
DP-32 HO Handcar Shed $14.00
Send $1.00 for HO,HOn3 catalog.

Durango Press

MICRO ENGINEERING
1120 EAGLE RD.
FENTON, MO 63026

G Gauge **RYAN** **½" Scale**

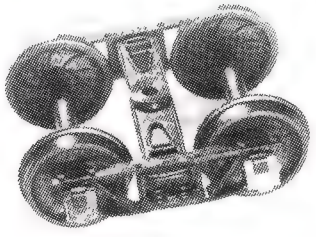


D&RGW Freight Truck
3'-7" wheelbase

P-101 — LGB (G) gauge
P-102 — ½" scale, 3' gauge

Manufactured by Grandt Line
Cast in DuPont Delrin
Dealer and wholesaler inquiries invited

$16.50/pair + $1.50 postage and handling



RYAN Equipment Company, Inc. — Railway Products Division
2674-76 Coyle Ave., Elk Grove Village, IL 60007 312-437-7450

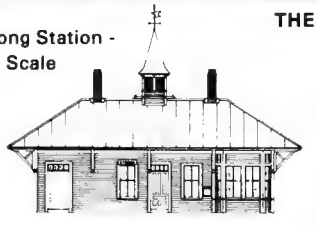
On2 Model Railroad Car Kits

SANDY RIVER CAR SHOPS

Bridgton and Saco River Box Car 72 (71-73 Series) 34 foot long cars $18.95

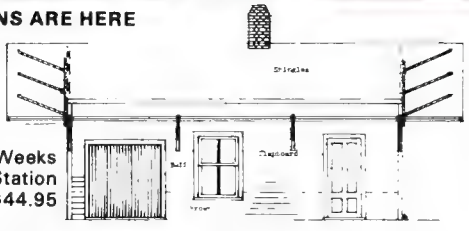
Mass. Res. please add 5% Sales Tax.

Kit B 10, Strong Station - $59.95 1/4" Scale

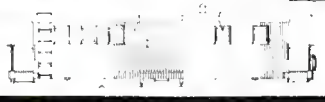


New in HOn2½
HO383, SR & RL 33 Pulpwood Car Kit - $9.00
HOTCDA WW & F Reefer Car Kit - $8.50

THE STATIONS ARE HERE



Kit B 8, Weeks Mills Station - $44.95



Wiscasset, Waterville & Farmington On2 Caboose 301 $34.95

SANDY RIVER CAR SHOPS P.O. 573, South Dartmouth, Mass. 02748

Denver or San Diego??

Which of our two fine stores is more convenient for your needs? Just stop by, phone or write for all your model railroad needs. We stock: HO, N, Z, LGB, Marklin, etc, and one of the largest stocks of brass in U.S.

	CUSTOM BRASS		
CV	2-8-0 M3A w/elesco	new	$375
CV	2-8-0 M3A w/worthington	new	375
C&S	Caboose no 1006 HOn3	mint	59
	FOMRAS		
CNJ	4-2-4T 'Star' Inspection loco		269
	HI-COUNTRY BRASS		
	23' log car, less trucks, rare!		25
	PSC/IHM		
RGS	4-6-0 no 20 HOn3	new	296
RGS	4-6-0 no 22 HOn3	new	296
RGS	4-6-0 no 25 HOn3	new	296
D&RGW	Combine no 212 HOn3	new	89
D&RGW	'Silverton' car no 212 HOn3		89
D&RGW	'Pagosa Junction' car	new	94
	KEY		
Cass/Meadow River 3 trk heisler no 6		new	459
Mt Rainier Scenic/West Coast Spec 3 trk			459
V&T	4-6-0 no 25 fact/ptd	new	389
V&T	4-6-0 no 25	new	339
	NICKEL PLATE		
MACK	Brill Rail Bus HO	mint	119
	NWSL		
Crown Willamette 2-6-6-2T no 12 nob		rare	650
Ga Pacific 2-6-2T no 9		mint	210
Climax	A 12 ton, vert boiler HOn3	mint	210
Climax	A 12 ton, vert boiler c/pt	mint	195
Baldwin	Logging tender	mint	75
	ORIENTAL		
Biles Coleman log car 101-110 HOn3		new	42
Biles Coleman log car 111-123 HOn3		"	42
	OVERLAND		
D&RGW 'O' scale caboose, orig vers		new	159
D&RGW 'O' scale caboose, modern		new	159
Jordan	Spreader	mint	225
McGiffert	Log Loader	new	289
	GHB		
BRILL	Model 55 Railcar	new	205
	PFM		
D&RGW	2-10-2 F-81 class c/ptd	mint	675
D&RGW	2-8-8-2 L-125 c/ptd	mint	495
D&RGW	4-8-2 M-75 class fact/ptd	mint	625
D&RGW	Motor car no 592	new	165
SIERRA	2-6-6-2 cust/ptd	mint	295
Climax	B class, diamond stack	mint	295
Heisler	90 ton orig vers tarnish	mint	275
Heisler	90 ton orig vers mid-run	mint	275
Vulcan	Duplex	new	379
CV	Caboose f/pt 'Maple Leaf'	new	99
UINTAH/D&RGW aux water car HOn3			70
	SUNSET		
GP-9	Freight version	mint	99
RS-1	Diesel	new	99
RS-3	Diesel	new	99
	WESTSIDE		
C&S	2-8-0 no 75 HOn3	mint	359
D&RGW	2-8-2 K-27 slide valve orig c/pt		210
SIERRA	2-8-0 no 24	mint	159
WSLCo	Shay no 8 3 trk HOn3 c/pt		399
	LAMBERT		
C&S	2-6-0 HOn3	mint	149
C&S	2-6-0 Hon3 c/pt no decals	mint	159

CURRENT BRASS:

Here is a partial listing of brass models on hand at the time this ad was done. Call or write for a free copy of our monthly 8 page brass list. You can sell or trade-in your surplus brass. Ask for details. Brass orders sent prepaid in USA if order totals $75 or more; less than $75, please add $2.50 for shipping in USA.

BOOK SALE: 15% OFF

any books listed here if you order before 2/28/86. After 2-28 discount is 10%. Minimum order for the 15% discount is $35. Prices incl. postage in USA. On orders under $20, add $1 for post. Prices subject to change by the publishers. Send for FREE book list (300 titles).

CREDIT CARDS: We honor Visa, Mastercard, Choice, Discover and American Express.

HI-COUNTRY BRASS
10101 E. Hampden Ave.
Denver, Colorado 80231
Phone--303--368-9607

HI-COUNTRY BRASS
118 Encinitas Blvd.
Encinitas, CA 92024
Phone 619--944-0415

THE NEWEST BOOKS & SOME SPECIALS

APPLE Country Interurban, Yakima, WA, 130 p. SALE	$11
BROOKLYN TROLLEYS, Greller & Watson, 150 pages	20
CHICAGO & Illinois Midland, Wallin, 244 p. SALE!	17
GOIN' RAILROADING, A Century of Colorado High Iron	35
I REMEMBER PENNSY, Wood, 168 pages	24
KATY SOUTHWEST, McCall & Schultz, 144 pages	25
LINK with a LONLEY LAND, Temiskaming & No Ont 228p	30
LOCOMOTIVES in MY LIFE, Wood, 320 pages	23
MEMORIES of READING Co POWER, Carleton, 144 p.	29
MILWAUKEE ROAD Narrow Gauge, Bellvue, Cascade & W	30
MINNESOTA Logging RR's, King, 224 p. SALE!	19
NARROW GAUGE Pictorial 2, passenger cars, Robb	20
NARROW GAUGE in OHIO, Hauck, 256 pages	30
STEINBECK Country Narrow Gauge, Monterey Bay, 250 p	30
The Unique NEW YORK & LONG BRANCH, Wood, 240 p	26
MANY FACES of the PENNSY K$, Pennypacker & Staufer	22
VERMONT's GRANITE RR'S, Jones,Maxfield,Gore, 275 p	35
WESTERN MARYLAND Steam Album, Price, NRHS	28

MORE NEWBOOKS

AMERICAN RR PASSENGER CAR, White, 700 p, soft	$35
CZ: CALIFORNIA ZEPHYR STORY, Zimmerman	12
CALL the BIG HOOK, D&RGW wrecks, Dougherty, 256 p	22
The CANADIAN, story w/color of CPR flagship train	40
CANADIAN PACIFIC Steam Locos, 450 pages	55
CAR & LOCO CYCLOPEDIA, 1984 edition	70
CHESAPEAKE & OHIO, Dixon, 129 pages	16
CHICAGO GREAT WESTERN in Minnesota, Bee, 115 p.	25
CL&N: history of Lebanon & Northern, 250 pages	30
COLORADO's MTN RR's, LeMassena, 49 full color, 384 p	40
COLORADO & SOUTHERN, Ferrell	35
DIESEL BUILDERS: F-M & LIMA, Interurban Press	25
DIESELS of SUNRISE TRAIL:LIRR,Scala,225 color photos	32
DONNER PASS, Signor	48
DUNELAND ELECTRIC, CSS&SB, Kaplan, 112 pages	20
ED NOWAK's NYC	22
EMIL ALBRECHT's UP Vol 1,loco action shots, Wagner	20
FOGG & STEAM, 28 color plates 14x10, now softbound	25
GHOST RR's of ARIZONA, Sayre, 150 pages	15
KEY ROUTE Vol 1, Bay area, Interurban Press	32
KINSEY:Photographer,Loco portraits,logging in Pacific NW	35
LITTLE BOOK CLIFF Rwy, Colorado coal, 150 pages	25
LITTLE JEWEL, Soo Line story nice!	39
MIDLAND ROUTE, McFarland	45
MEMORIES of B&M, full color	14
NARROW GAUGE MODEL TRAINS, Chilton	18
Narrow Gauge Pictorial Vol 4,Robb,D&RGW stocks, tanks +	20
NEW ENGLAND Alcos in Twlight,Hartley,82 color photos	18
1930 LOCOMOTIVE CYCLOPEDIA (largest edition ever)	99
NO MORE Maountains to Cross, Milw in 1980's, Olmstead	30
NORTHERN CALIFORNIA RR.s Vol 2, Matthews, 224 p	45
NORTHERN PACIFIC Rwy, McGee, 300 pages	40
NORTHERN PACIFIC:Supersteam Era (1925-1940)	45
OF ZEPHYRS & COMMUTERS, CB&Q E units, Olmstead	27
OVERLAND to ROCKIES, Fox, 104 pages	15
PASS CARS S.P. Coast Line Trains NYP	40
PEORIA WAY, TP&W, McMillan, 130 pages	30
PRUNE COUNTRY RR.s, the San Jose, Calif. area	35
QUARTER CENTURY of SANTA FE PASS. TRAINS	16
RAIL PASSAGE to PACIFIC (CAJON PASS) Walker new	46
RAILROAD that LIGHTED SOUTHETN CALIFORNIA	22
RAILROADING THRU CAJON PASS (few left)	17
RAILROADS of NEVADA Vol 2, Myrick delayed	40
RAILROADS in MEXICO Vol1, illus history, Sundance	39
RAILS 'NEATH the PALMS, Florida short lines, Mann	30
RAILWAY COUNTRY, Canadian Rwy at their best! NYP	45
RED ARROW-SUBURBAN LINES, Interurban Press	32
RIO GRANDE NARROW GAUGE, Norwood, 300 pages	40
SAN DIEGO & ARIZONA EASTERN, Impossible RR	35
SANTA FE MOTIVE POWER, McMillan, 200 pages	40
SNOWPLOW, CLEARING MOUNTAIN RR.s, Best	25
SP DIESELIZATION, Garmany, PFM, color, 400 pages	49
STORY of METRO: Washington, DC Rapid Transit	15
STREAMLINERS, CARS- Vol 2: The BUDD Co., 120 p.	12
STREAMLINER CARS- Vol 3: ACF & other builders, 140 p	13
TOURS of Discovery, San Fran Muni Rwy, McKane, 158 p	30
TRACTION CLASSICS Vol 2, Middleton, 184 pages	36
TRACTION CLASSICS Vol 3, Middleton	39
TWIN CITY RAPID TRANSIT PICTORIAL, 96 pages	13
UP 3985, Hill & Kindig nice!	10
V&O STORY, McLelland's RR, 104 pages	20
SANTA FE STREAMLINERS,Zimmerman,104 p. NYP	16
WEST of SANDPATCH B&O, Roehm, 96 pages NYP	12
FRISCO SOUTHWEST, McCall, 120 pages	17
GIANTS of WEST, UP super powered locos, Cockle, 208 p	24
GRAND CENTRAL STATION, Middleton, 160 p.	23
GROWING UP WITH TRAINS Vol 1, Steinheimer	17
GROWING UP WITH TRAINS Vol 2, Steinheimer	19
HEADLIGHTS & MARKERS, Donovan/Henry, 400 p.	18
HORSE CARS/Streamliners, St Louis Car Co, Lind, 400 p	23
400 STORY, C&NW, Scribbins	35
INSIDE MUNI of San Francisco, McKane/Tarias	36
ILLUS TREASURY of Rail Rapid Transit Systems & Cars	50
INTERURBAN to MILWAUKEE, CERA, 160 pages	15
IOWA TROLLEYS, covers all Iowa, CERA, 300 pages	25
IRON HORSES to PROMONTORY, Best, 207 pages	27
IRON HORSES of SANTA FE Trail, Worley, excellent!	49
IRON MEN & COPPER WIRES, story of So Calif Edison	14
KATY NORTHWEST SALE!	14
KETTLE VALLEY, Riegger, 240 pages	30
KEY SYSTEM ALBUM, 220 photos, 120 pages	18
LAST of GREAT STATIONS, L A Union Terminal, 112 p	12

LOGGING

SUBSCRIPTION $16
PER YEAR (6 ISSUES)

tall timber
SHORT LINES
THE MAGAZINE OF MODEL
RAILROAD LOGGING.
4928 N. FRACE ST., TACOMA, WA 98407

NARROW GAUGE

BROWSE AND SELECT FROM OUR LARGE STOCK OF
ROLLING STOCK • DETAIL PARTS • MIRCOMOTORS
TOOLS • DECALS • PAINTS AND EXPERT HELP!

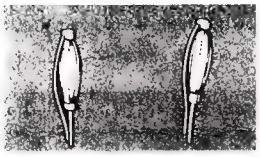
ORANGE COUNTY'S LARGEST AND
MOST VARIED SUPPLY OF BOOKS

A GREAT MAIL ORDER SERVICE TOO!

THE LITTLE DEPOT
AT HOBBY CITY
DAN and JAN BRADLEY owners
1238A S. Beach Blvd. • Anaheim, Ca. 92804
(714) 828-5080

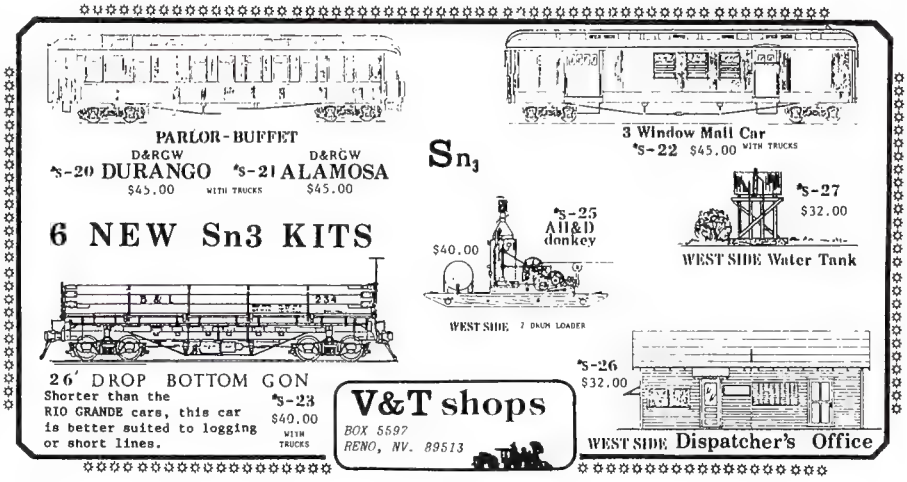
OPEN 7 DAYS.
MON-FRI
10-8
SAT-SUN.
10-6

AX-90 1.5V AXIALIGHT



0.022 dia. by 0.060 length
Insulated leads: 0.006 dia. by 6" length
$3.50 each
SSAE for catalog sheet

UTAH PACIFIC
MODEL RAILROAD PRODUCTS
P.O. BOX 8174 ● SALT LAKE CITY, UTAH 84108



PROTECT AND PRESERVE YOUR

NARROW GAUGE AND SHORT LINE

GAZETTE

COLLECTION

Keep your **GAZETTE**s in these finely crafted and unconditionally guaranteed binders and cases custom made specially for the GAZETTE.

Binders are $8.50 each or 3 for $24.75 or 6 for $48.00. Cases are $6.95 each or 3 for $20.00 or 6 for $36.00.

For orders outside the U.S. add $2.50 per unit for postage and handling. U.S. currency only. Include check or money order with your order. Please allow 4 - 6 weeks delivery in U.S.A.

Order direct from:
Jesse Jones Industries (since 1843)
Jesse Jones Building, Dept. NGSLG
D Street and Erie Ave.
Philadelphia, PA 19134

FINESTKIND MDL'S

Specializing In The Manufacturing Of Limited Run, High Quality S Scale Structures

101	MINERS SHACK	12.50
102	FALSE FRONT STORE	12.50
103	OPHIR TRAM HOUSE	27.50
104	MONTEZUMA POST OFFICE	29.50
105	BURNSIDE NO. 7 TENSTAMP MILL	65.50

And In Early 86

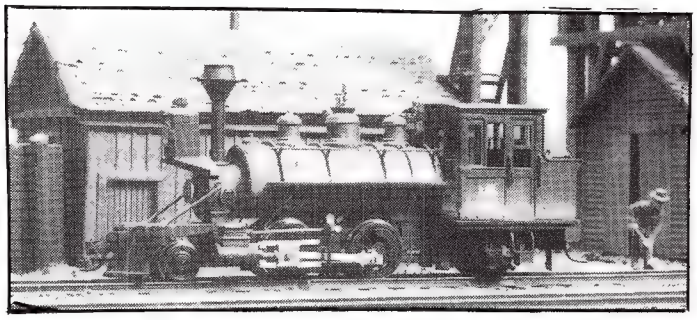
106	AMEX OIL AND GREEZE CO.
107	NATIONAL BELLE MINE
108	SILVERTON HARDWARE CO.

All Kits Feature:
Northeastern Scale Lumber • Grandt Line Castings
Builders in Scale and/or Williams Bros. Roofing, • Full Size Drawings

Please Include $2.00 For Postage KS. Residence Add 4.5% Sales Tax

P.O. BOX 25052 OVERLAND PARK, KS. 66210-25052

Baldwin 2-4-2 Kit



The Baldwin 2-4-2T Kit is now available in either HON3 or HON2 ½. The kit is complete with motor and a metal frame. The superstructure is molded in plastic for easy assembly. Assembly instruction book is included. **Only $59.95 Suggested retail**

Distributed exclusively in the US by Sunset Models.
138 W. Campbell Ave. Campbell, CA 95008
(408) 867-1700

ERIE LIMITED CORP.

1-1-8 TOYOTAMA-KITA, NERIMA-KU, TOKYO 176 JAPAN

NEW NEW
1986
S/Sn3 Catalog

- 1986 Catalog Features -

- Brass Imports.
- Car Kits.
- Structure Kits.
- Track Supplies.
- Decals, Dry Transfers.
- Hundreds of Detail Parts.

Everything you'll need for your S/Sn3 Railroad, and only $3.00 postage paid.

VILLAGE DEPOT

710 North 19th St.
Cottage Grove, OR 97424
(503) 942-5117

PENNSYLVANIA
(Waynesburg & Washington)
The only Pennsy Narrow Gauge

2-6-0 No. 4

HOn3

Custom Brass
77 West Nicholai Street,
Hicksville, N.Y. 11801

At Your Dealer Soon

Every Month, a Locomotive.

USRA HEAVY 4-8-2, JULY 1983

ALCO RS3, AUG 1984

In each issue of MAINLINE MODELER, we focus on a steam or diesel locomotive, and give it our full attention. Fine drawings, lots of photos, and all the data you need.
***Subscribe Now!* 28.00 U.S./yr.**

MAINLINE MODELER

5115C Monticello Dr. • Edmonds, WA 98020

ESCAPE TO S SCALE

S scale is the ideal size! Get into S or Sn3 today! Read the bi-monthly **S Gaugian** magazine for articles, plans, photos, ads, $18.00 a year; $22 outside USA

Sn3 Modeler. New S narrow gauge magazine! $9.00 yearly, two issues; $15.00 outside USA.

We offer these other books for you:

Sn3 MODELING—A 96-page softbound with articles, photos and plans of S narrow gauge model railroading including color photos. $11.95 and $1.50 postage.

YOUR INTRODUCTION TO S GAUGE—72 pages of articles, photos, plans. $6.95 and $1.50 postage.

RIO GRANDE NARROW GAUGE by John Norwood. A 312-page 8½x11" hardbound with 18 chapters describing the Rio Grande 3-ft. lines in southern Colorado and New Mexico from birth to death. 18 chapters, 8-page four-color section. $39.95 and $2.25 postage.

WABASH. 320 page hardbound, 550 photos, $38.95 and $2.25 postage.

RIO GRANDE STEAM LOCOMOTIVES (Std. Gauge) 200-page 14 chapters, 26 folio drawings of standard gauge steam. $23.95 and $2.00 postage.

D&RGW NARROW GAUGE PLAN BOOK—56 pages (11x17") book of official diagrams of steam, freight and passenger cars, work equip. $6.95 and $1.25 postage.

SPIRIT OF THE SOUTH SHORE, 80 pages, $11.95 and $1.25 postage.

West Side Lumber Co. 74-page special issue of *S Gaugian;* **Sn3 issue of** *S Gaugian,* 60-page issue featuring this growing scale! $4.50 each postpaid.

Send $3.00 for our S/Sn3 product catalog; $4.50 outside USA.

Dealer inquiries invited

Heimburger House Publishing Co.
310 Lathrop Ave.
River Forest, IL 60305

R. E. Sloan
is sold to
Narrow Gauge Stuff
P. O. Box 5033
Hopkins, MN 55343

Narrow Gauge Information and
Lettering Guide – 4th Ed. $5.00
Nn3 Manual – 3rd Ed. $5.00
Price List Only for Long SSAE
1983-84 Sloan Prices Valid

STEAM ON THE WAY!

Undec.
Kit #380

HOn3 B-2 truck

Announcement - Roundhouse proudly announces the completion of our HOn3 scale Logging Mining & Short Line Shay Locomotive Kit! ... Introducing the HOn3 scale "narrow" gauge Lima Class "B" 42-ton, 2-truck geared Shay locomotive kit! Or, just ask for the "Roundhouse B2 Shay" for HOn3 'Narrow' gauge, No. 380 @ $45.00

What is it like to "build up" and operate a Roundhouse Shay kit ... ☞ Exciting ☞ Time Consuming ☞ Challenging ☞ Yes, and sometimes Frustrating!! Can someone (anyone) with little or no experience actually build the Shay? Anything is possible: ☞ Perseverance ☞ Time & ☞ Patience is the byword for this project. (This is a project which necessitates having (4) hands, each 3/4 smaller than what you now have.)

Just what can I expect in the way of a low cost and inexpensive Shay kit? Everything humanly possible: ☞ First quality hand tooling utilized in manufacturing ☞ Superstructure (cab & fuel bunker) are molded as one piece and the boiler & underframe are one piece zamac hard metal castings ☞ All necessary super detailing (add on parts) and hardware/screws come with the kit. Plus a powerful 12 volt d.c. motor.

Ease of assembly is accomplished using the specially prepared 16 page instruction booklet, furnished with the Shay kit. Step by step the modeler is introduced to individual parts and the overall Shay locomotive assembly.

The modeler starts with the Shay superstructure (boiler, cab & fuel bunker), followed by construction of the Shay underframe, gear box and power mechanism. Next, the modeler assembles the Shay locomotive's two geared power trucks, synchronizing the side frame geared shaft with the drive wheel gears (just like the original Shay), followed by the FUN part of the kit construction - The Shay 3 cylinder engine assembly! Last, the final assembly and painting/lettering of the Shay locomotive. **Now** you almost have your Shay... But wait! Roundhouse has a pleasant surprise.. The *Shay Modeler's Handbook* - to help you finish & super detail your finished Roundhouse Products B2 Shay kit. New, big 8½x11 (64 pages) "Shay" modelers book...

64 Pages!

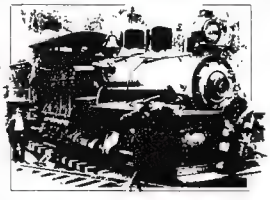
Available from your Roundhouse retailer right along with the Shay Kit (at additional cost).

Retailers *book* - Available in:

DEAL #609

Book $10.50 each

SHAY Modeler Handbook

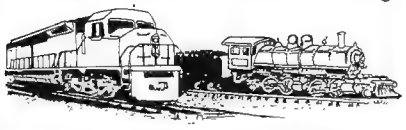


Model Die Casting, Inc.

3811 W. ROSECRANS. P. O. BOX 926 HAWTHORNE, CA 90250

Roundhouse SHAY

TAKE COMMAND DYNATROL®



Independent Train Control

Send stamped self-addressed envelope for information.

POWER SYSTEMS INC
56 BELLIS CIRCLE
CAMBRIDGE, MA
02140
(617) 661-0660

IF YOUR INTEREST IS IN
MINING, LUMBERING
OR
COLORADO NARROW
GAUGE,
WE HAVE KITS AND
PARTS TO SATISFY
YOUR INTERESTS.

SEND A SSAE FOR PRICE LIST.

RIO GRANDE MODELS LTD.

Box 4463 Santa Clara
Ca 95054

European Narrow Gauge:

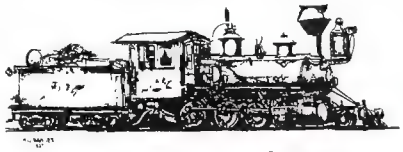
Bemo, LGB, Roco, Fama, Fulgurex. Complete stock, also standard gauge, equipment from all European manufacturers: Märklin, Rivarossi, Liliput, Trix, Roco, Faller etc. - you name it, we ship it.

Make use of excellent exchange rate - try us for attractive prices and dependable service. Specify wants, scale; send $ 2.- for air price list.

BEMO: RhB Motor Coach in stock, complete program available.

MIXED TRAINS, Box 33, CH-8042 Zurich, Switzerland

MIXED TRAINS



LITTLE TOWN HOBBIES

1500 W. Littleton Blvd.
Littleton, Colorado 80120

Colorado Railroad Specialists

Send stamped self addressed
envelope for Brass List.

Doug Ramsey 1 (303) 794-7714

On3 CRAFTSMAN TYPE KITS

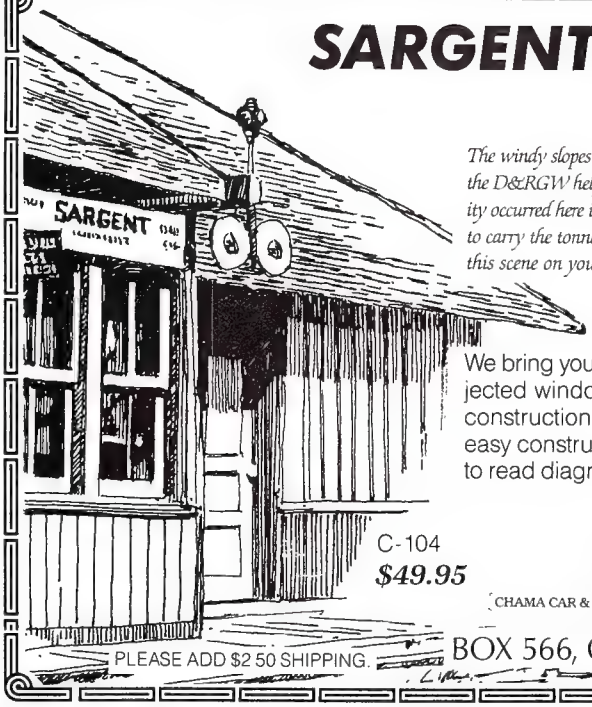
FLAT CARS 29'			
650	UNDECORATED		$ 9.95
651	RGS		10.95
GONDOLAS			
660	UNDECORATED 30'		$13.95
661	RGS 30'		14.95
662	COLORADO & NW 32'4"		14.95
663	VICTOR GOLD MINE 30'		14.95
BOX CARS (TRUSS ROD)			
653	UNDECORATED 30'		$15.95
654	F & C C 30'	BOXCAR RED	17.95
655	NCO 29'6"	BOXCAR RED	17.95
656	RGS 29'6"	BOXCAR RED	17.95
REEFERS (TRUSS ROD)			
664	UNDECORATED 30'		$17.95
665	TIFFANY 27' WHITE		19.95
666	D & RGW 30' YELLOW		19.95

All above kits are craftsman type wood kits. The deco-,00 rated kits are pre-painted and silkscreen lettered. Plastic and/or metal detail parts are included. All kits are furnished less trucks and couplers.

MAIN LINE MODELS
YE OLDE HUFF N PUFF
P. O. BOX 53
PENNA. FURNACE, PA 16865-0053

SARGENTS DEPOT

IN "S" SCALE



The windy slopes of Marshall Pass was the setting for the D&RGW helper station at Sargents. Much activity occurred here in years gone by, with engines added to carry the tonnage over the hill. Why not re-create this scene on your layout with our new depot kit.

We bring you this new kit with plastic injected windows and all new urethane construction. The kit was designed for easy construction, with complete easy to read diagram instructions.

C-104
$49.95

CHAMA CAR & STRUCTURE CO.

PLEASE ADD $2.50 SHIPPING. BOX 566, CHAMA, NM 87520

CS MODELS
presents
C.P.R. WATER TANK

WOOD CRAFTSMAN KIT
N SCALE — $16.95

ORDER FROM:

F110-99
232 - H ST.
BLAINE, WA
98230

1135 LONSDALE
N. VANCOUVER, B.C.
CANADA
V7M 2H4

DEALERS & DISTRIBUTORS WELCOME

Burlington Route

NARROW GAUGE IN STOCK

Colorado and Southern

OVERLAND SN3 2-8-0 CONSOLIDATIONS
COLORADO & SOUTHERN #60
COLORADO & SOUTHERN #71
COLORADO & SOUTHERN #74
RIO GRANDE SOUTHERN #74
OVERLAND COLORADO & SOUTHERN CABOOSES #1002, #1003, #1005, #1006, #1009
THINFILM DECALS IN STOCK FOR NARROW GAUGE
P.B.L./RIO GRANDE LOCOMOTIVES & CABOOSES
P.F.M RIO GRANDE SOUTHERN/ GALLOPING GOOSE
CHAMA MODEL SHOP & GALLERY SN3 TRUCK MODELS
TRIANGLE SCALE MODELS — CARS AND ACCESSORIES
RIO GRANDE MODELS — CARS AND ACCESSORIES
LOGGERS — COMPLETE LINE OF SUPER DETAIL PARTS AND ACCESSORIES
LOGGING & MINING BOOKS

VIDEO CASSETTES/KALMBACH/HOPEWELL
SUNDAY RIVER/VIDEO RAILS/LASTING IMPRESSIONS
INTERURBAN/RUN-8/J.M.J./TRAINS/MODEL RAILROAD

BRASS WHISTLE TRAINS

VISA, MASTERCHARGE and AMERICAN EXPRESS accepted
STOP IN AND VIEW OUR COMPLETE SELECTION
OPEN 11 to 6:30 MON. THRU FRIDAY - SAT. 9:00 to 5:00
OPEN FRIDAY EVENINGS TILL 8:30 DURING SUMMER MONTHS
815/398-2877 - 1665 CHARLES ST., ROCKFORD, IL 61108

HISTORY — PRESERVATION WORK

READ THE

JOIN

FRIENDS OF THE

EAST BROAD TOP

$15.00/yr.

13120 BELLEVUE ST.
SILVER SPRING, MD 20904

PLANS — MODELER'S INFO

O SCALE NEWS
The O Man's Journal

48/ft.

All O Scale!

Now we're Bigger, Better & Sharper!

$2.50 for sample copy ppd.
$12.50/year (6 copies)
Send check or money order to:

O SCALE NEWS 48/ft.
6514 North 11th Street
Philadelphia, PA 19126

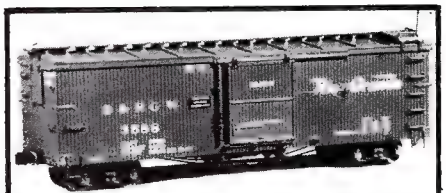
Models by Roger Schenck

5 TYPES OF SPNG TRUCKS IN SN3

SN3 CUSTOM BUILT
D&RGW STOCK 90.00
RGS/C&S STOCK 100.

SEND SSAE FOR LIST

7103 Monlaco Rd.
Long Beach, Ca. 90808



HOn3 D&RGW BOX CAR KIT

- Realistic – Just like the Prototype
- Beautifully Detailed
- Side Doors Slide
- Car Body is one piece with most of the detail molded (Roof Walk too)
- Precision Throughout – Crisp and Sharp

KIT #130 less decals and trucks only $9.95

THE RAIL LINE CO.
3600 PITTMAN ROAD • INDEPENDENCE, MISSOURI 64052

RIP TRACK

$3.00 for 15 words or less, name and address free. Additional words .15 each to 70 words. Any words over 70 are .50 each. Ad must be paid for in advance.

Please furnish a street address for the GAZETTE's private records when you use a P. O. Box number in your ad. Type or print your ads neatly. Thanks.

RIPTRACK DEADLINES:

11/15 for Jan/Feb issue
1/15 for Mar/Apr issue
3/15 for May/June issue
5/15 for July/Aug issue
7/15 for Sept/Oct issue
9/15 for Nov/Dec issue

Sorry, no cancellations after deadline!

FOR SALE: Sn3, extensive collection of brass/kits. SSAE for list. Jeff Malakoff, 13 Coolidge Ave., Stamford, CT 06906. 203/323-6688.

FOR SALE: Kadee Twin "Rail Spiker" Code 100 (little use) and 20,000 spikes Code 100. Want $75.00 U.S. Paul De Launiere, 127 Morley St., Greenfield, Park, Quebec, Canada J4V 2Z1.

G SCALE LIVE STEAM: New 0-6-0 "Old Colonial" plantation locomotive, British craftmanship at its best, and to compliment this superb engine a flat car and stake car are available. To view this and our other live steam locomotives and home builder kits and many other accessories, please enclose 2 dollars for our catalog and send to: F. J. Delez, 17 Cunliffe St., Coal Aston, Sheffield S18 6AF, England.

FOR SALE: Balboa On3 D&RGW C-21 2-8-0, $375; PFM T-12. $425; Kidder 44-Ton Diesel, CLW Drive, $195. Any trades considered. John Hutnick, 1132 Clinton Terrace, So. Plainfield, NJ 07080. 201/753-1968.

DOES ANYONE HAVE accurate information on the construction of "Grasse River R.R.'s" caboose "Perry's Pride." Also looking for person in my area of Northeastern New Jersey to form a "round robin." I am planning an HOn2½ layout. Walter Hering, 131 Spring St., Harrington Park, NJ 07640.

EAST BROAD TOP: Hmk 2-8-2's #15, 16, 17, 18, $270 each, or all four, $1000. FSM kits, send address for list, SASE not necessary. Stone Church Branch, P. O. Box 592, Navesink, NJ 07752.

FOR SALE: HOn3 engine, passenger cars, cabooses, books, kits. SSAE for list. Bob Felber, P. O. Box 181, Syosset, NY 11791.

PFM Sn3 D&RGW #319, $330.00. NWSL On3 2-6-0, $169.00. Sunset EBT 2-8-2, $350.00. Key Meadow River Shay $339.00. United Benson or Mich-Cal Shays, $270.00. West Side #10 Shay, $320.00. Bnl HOn3 Shay $270.00. V&T #26, $159.00. K-27 early slide, $129.00. We are stocking all major brass importers. Over 500 pieces in stock. Collections purchased. Trades. Branchline, R.D. 2, Box 589, Holtwood, PA 17532. 717/284-3608

FOR SALE: Sn3 brass, kits, parts. SSAE for list. John McGarry, P. O. Box 454, West Kingston, RI 02892.

BOOKS: "The Art of Brass," Vol. 1, Presse Eisenbahn; "Great Northern Ry.", Chas. & Dorothy Wood, PFM publishers. Both for $60., mint, ppd. G.F. Monahan, M.D., 18 Cutts Rd., Durham, NH 03824.

WANTED: Shay Loco. Titan of the Timber by Michael Koch. Price and condition. To Bill Dembeck, 1302 Palomino Dr., Warrington, PA 18976. Phone 1-215/343-1421, after 4.

FOR SALE:Sunset G scale C-16 black 1 of 20 new, $1600. On3 C-16 #278 $395, K-28 $725, RGS #74 $475, RGS #20 $595, RPO Chili $140, EBT #16 $425, Precision C&S #58 $625. High gon w/p low $125, Combine 212 ptd w/interior $165, Combine ptd. $155, Overland Ditcher $475, Log Loader $425, PFM #50 Diesel ptd. SV $175, RGS #20 can motor 37:1 gears lousy paint, $395. Bruce Saylor, 2836 Leon Ave., Audubon, PA 19403. 215/666-6572.

BUY-TRADE-SELL On3. CB Uintah #51 $775. Ptd. 3-CB 2- dome TCX tanks two ptd. $85 each, one $75. Snow-flanger $75, Westside CONX $75.00 Hallmark Coach #320 $140, Durango Press Marion steam shovel kit, mint $275. Overland auxillary water car $125. Grandt Porter 30 in. gauge w/cab interior $99. Carson & Colorado 5 car San Juan set built bodies $325. SSAE for list of kits, buildings, cars, details, parts. Bruce Saylor, 2836 Leon Ave., Audubon, PA 19403. 215/666-6572.

WANTED: EBT photos, negatives prior to 1956 closing of locos, cars, trains, structures, mines, anything. Bruce Saylor, 2836 Leon Ave., Audubon, PA 19403. 215/666-6572.

WANTED: On3 Gemini castings for WSLCo. - do you have any gathering dust? Also, CHB gauge faces. Stephen Barmash, 10500 Rockville Pike, Apt. 110, Rockville, MD 20852. 301/493-5109.

SALE OR TRADE: On3 and Ostd Brass (incl. PFM, PSC & USH), SSAE for list, Earl Martin, 11120 Rokeby Ave., Garrett Park, MD, 20896. 301/949-0096.

WANTED: On3 tender for Sunset K-28. Jim Pitcher, 687 Geneva Drive, Westminster, MD 21157. 301/848-6033.

HELP: Need descriptive sheets for RBJ9-19, 20, 21 & 22 from Chione. (Gons & stocks). Never recieved. Copy will do. Thank you. Charlie Flichman, 6909 Crandall Court, NC 27012.

"HEISLER 1914 Factory Catalog" Reproduction of the official 1914 heisler Locomotive Company factory catalog. $5.99/copy plus $1.55 postage and handling. Dennis Mijanovich, 5321 Laurel Ridge Dr., Sanford, NC 27330.

FOR SALE: HOn2½ SR&RL. Sango Railbus #4 kit $50; Sango Snowplow #513 $30; 4 Sango Passenger Trucks (assembled, very free rolling) $20 for the 4; 8 Grandt Line Archbar Trucks $25 for the 8. Money order or bank check only please. Don Ruess, 5813 Morning Forest Drive, Raleigh, NC 27609. 919/876-7485.

FOR SALE: HOn3 RGS. PSC #22 TRO $225; Key #42 TRO $175. Both in excellent operating condition with original boxes. Money order or bank check only please. Don Ruess, 5813 Morning Forest Drive, Raleigh, NC 27609. 919/876-7485.

FOR SALE: HOn3 D&RGW. PFM K-27 TRO $125; Key C-19 #346 TRO $125; Key C-19 #346 TRO $95 (tender has polystyrene base for coal load and scale wood boards added to front of coal bunker but otherwise in original condition). All in excellent operating condition with original boxes. Money order or bank check only, please. Don Ruess, 5813 Morning Forest Drive, Raleigh, NC 27609. 919/876-7485.

FOR SALE: HOn3 items. Rio Grande Models D&RGW Pile Drive Kit $20.00; 14 pair Grandt Line Black D&RGW trucks $35.00; 10 pair Grandt Line Brown D&RGW trucks $25.00. Money order or bank check only please. Don Ruess, 5813 Morning Forest Drive, Raleigh, NC 27609. 919/876-7485.

WANTED: Koch books, Richard Prince books. Fine Scale kits, Thomas Yorke kits, Paige kits. Tom English, 2132 Lakeview Circle, Matthews, NC 28105.

KEY HOn3 RGS C-17 #42 $195. Key C&S B4E $235. WSM D&RGW K-36 $285. WSM D&RGW K-37 $235. CB On3 C&S Caboose $55. PFM On3 D&RGW Caboose $125. NWSL Peninsular Terminal #103 2-6-2T $150. NWSL Minerats 2-8-2T $195. Dick Hale, DeSoto Electric Shop, 2585 Midway Road, Decatur, GA 30030. 404/371-0425.

FOR SALE: Large collection of On3 Locos, Cars, Kits, Supplies, etc. Including hard to find Thos. Yorke, PFM, IHM, Kemtron, Rio Grande Models, Durango Press, Simpson, Classic Miniatures, Don Winter, GHB, Crossing Gate, V&T Shops, Chooch, Magnuson, Muir, Brommer, Kramer, Model Masterpieces, Tomalco, La Belle, Structure Co., CSM, Railway Engineering, etc. Please send SSAE for list. DeWitt's Railroad Models, 857 S. Orlando Ave., Winter Park, FL 32789.

FOR SALE: HOn3 PFM Benson Logging, Mich-Cal Lumber and Cowichan Valley #1 Shays. Plus other Shays and Locos. Also EM Brass cars and other car kits. FSM Kits. Send LSSAE for list. Mr. Marion Kershner, 3201 Barbara Drive, Middletown, OH 45044.

BEST DISCOUNT on select HO craftsman kits, equipment and tools. SSAE for details to: MMRHS, P. O. Box 7157, Dept. NG, Dearborn, MI 48121.

CHANGING SCALES: HOn3 brass, some craftsman kits and Grandt LIne detail parts. SSAE for list. Charlie Brown, 2945 Charlotte Dr., Baton Rouge, LA 70814.

WANTED: Yorke O scale kits. O-119 Pool Hall/Bordello, DE-101 Barber Shop, O-105 Stone Factory, O-107 Stone & Wood Store, O-108 Rocopila Station, O-121 Shortline Engine House. Clark Womack, 1627 Aldridge, Plano, TX 75075. 214/424-9005.

FOR SALE OR TRADE: HOn3 brass and craftsman structure kits. Am switching to On3. Long SSAE for particulars. Clark Womack, 1627 Aldridge, Plano, TX 75075. 214/424-9005.

UNASSEMBLED MODELS, tanks, ships, planes. All scales, LSSAE for list. Will trade for Sn3. Joe Sacks, 17474 E. Chenango Dr., Aurora, CO 80015.

HOn3 Key RGS C-19 #41 $215; Key C-18 correct tender, runs well $140; Westside C-16 #268 nice paint #180; Westside K-37 painted $180; PFM K-28 painted $195. Mike Horner, P.O. Box 1553, Idaho Springs, CO 80452.

NARROW GAUGE HOn3 craftsman kits at 20% off list. Rail Line, Clear Creek, Grandt Line, Rail Craft, books and many more. LSSAE for current list. Model Railway Supply Co., Dept. NG, 5103 S. 338, Auburn, WA 98001.

HOn3 PFM Sumpter Valley 2-6-6-2 1st run micro motor, gear head, sound PFM, $350.00. Neat! Key C-18 mint excellent runner $140.00. Balboa K-36 mint micro motor, gear head detailed, $260.00. PFM "Puffing Billy" 2-6-0 mint $125.00. Richard Dorman, 934 Old Taos Highway. Santa Fe, NM 87501. 505/988-2425.

HO, HOn3 brass locos, shays, cars. FSM, other car and structure kits, magazines, books, catalogs, miscellaneous suplies and equipment. On3 scratch-built freight cars. LSSAE for list. Frank Rose, 1600 Olympic Blvd., Santa Monica, CA 90404. 818/789-1106.

WANTED: Information about films containing shots of Maine 2-footer Wiscasset, Waterville & Farmington Railway. John Schruefer, 2601 Warring Street, Box #122, Berkeley, CA 94720.

HEAVIEST NARROW GAUGE Shay WSLCo. #10 complete run at Yosemite Mt. Sugar Pine RR on VHS or Beta $60.00, cassette tape from cab and outside of #10 $10.00, WSLCo. railroad spike mounted on plaque with location of spike, limited numbered eidtions $35.00, Yosemite Lumber Co. spikes same as above $35.00. Personal checks require additional time to clear. Phil Whittemore, 4526-A Auhay Dr., Santa Barbara, CA 93110.

FOR SALE: HOn3 WSM C-16 #278, excellent $130.00; WSM K-27 Piston Valve TRO $150.00; OMI AH Ditcher TRO $175.00; HO Balboa E-8 A/B set FP Daylight $160.00; all OB's. Ed Keogh, 5965 E. Shields, #104, Fresno, CA 93727. 209/291-3078.

SALE: Sn3 D&RGW C-16, RGS #22, PFM Goose, Rico, Pagosa Jct., 12 Freight (some unbuilt), 2 passenger, 6 turnouts, Hopper line S-2/3 (in box), Miscellaneous. $700 lot/trade LGB. 16+ HOn3 pass/freight cars (built, partial, new in box) $70. Complete Gazette. Norm Delucchi, 1165 Scotland Drive, Cupertino, CA 95014. 408/255-8167.

SUGIYAMA Galloping Goose No. 7 freight HOn3 $144.95; G.E. 16 ton Electric Locomotive HO-HOn3 $79.95; Flying Zoo T-boiler Shay HOn3-HOn30 $152.00; Porter 0-4-0 HOn30 $31.00; Mich-Cal Shay HOn3-HOn30 $143.95; Mini-land HOn30 D&RGW C-16 2-6-0 or C&S 2-6-0 $49.95; D&RGW Short Caboose $20.95; UTLX tank car $16.95; Keystone 70 ton Diesel $79.95. Coming On3 Climax and On3-On30 0-4-2T Baldwi. SSAE for list. Add $2.00 UPS. Tom's Shortline Hobbies, P.O. Box 1435, Modesto, CA 95353.

FOR SALE: West Side Lumber Co. Dispatcher's train sheets, last three years of operation. Over 300 sheets plus some blank unused. See example, page 66, "Last of Three Foot Loggers." Will not break up set, sell as one lot only. Price: expensive, but will dicker and talk trades. David W. Braun, 916/662-6543 or 916/924-8190.

USED AND OUT-OF-PRINT railroad books. Good books at reasonable prices. Send LSSAE to: RGS Books, Box 1964, Montrose, CO 81402.

WEEKLY WANT AD SERVICE starting January 19, 1986. Ads received by Tuesday are published on Friday. 20 weeks subscription $8. Ad rate 4 line for 3 weeks. 265 characters $4. Each additional line $1. Subscription and ad $10. Jim Snyder, 712 Margo Dr., Tempe, AZ 85281.

COLORADO MIDLAND 1900-1918 era locomotive decals. Two large sheets covering all classes. Complete set $12.00. HO scale. Suitable for "200" moderns. Daryl B. Ryder, Box 792, Kotzebue, AK 99752.

ONLY 3 LEFT: "Chili Line Tape" 60 min. with narration / Beta; full of information. $75.00 + 2.00. R. Dorman, 934 Old Taos, Highway, Santa Fe, NM 87501.

WANTED: Finelines Vol. 1, 2, 9, 10, Slim Gauge News. Will buy or trade railroadiana. Ron Rosenberg, 2 Highfield Rd., Harrison, NY 10528.

FOR SALE: HOn3 United Cowichan Shay $300. On3 Sunset C&S #74 2-8-0 $500. Both mint. Never used. Original boxes. John Martin, 133 Ave. B, Haledon, NJ 07508. 201/942-8638, after 6 p.m.

SEND 88¢ CENTS in stamps for our latest catalog for "HO", "N" "O" scales. Retail Store open Mon.-Sat. 10-5. We take special orders. Area Model Trains, P.O. Box 6123, Middletown, NY 10940.

O.R.&W.: Writing a book on the Ohio River & Western narrow gauge (formerly Bellaire, Zanesville, & Cincinnati). Need photos and information. Edward Cass, 21262 Byron Road, Shaker Heights, OH 44122.

FOR SALE: William Henry Jackson's Rocky Mountain Railroad Album. #48 Mint condition in original packing. Asking $300 or trade for On3 USH 13 ton Shay. John Goode, 10906 Windsor Dr., Westchester, IL 60153.

GAZETTE INDEX is now available for the first 10 volumes alphabetized by article title and cross-referenced to the general subject matter. Send $4 today for your copy. Mike Horner, P.O. Box 1553, Idaho Springs, CO 80452.

JANE'S WORLD RAILWAYS 1954-1955, 462 pages, many illustrations of foreign, U.S. equipment. I have a good book for $35. Herb Cearley, 6751 E. 9th St., Long Beach, CA 90815.

RAILWAY BOOKS from Great Britain. Narrow gauge and electric tramways our specialty. SSAE for list. Orient-Express Railway Models, 20156 Stanton Ave., Apt. 41, Castro Valley, CA 94546.

CUSTOM MODELBUILDING: Structures, all scales. Any type. Construction service offered for any commercially available structure kit. Send LSSAE for brochure to Brums Scale Models, 16 High St., Peterborough, NH 03458.

FOR SALE: Magazines 1916-1980: RAILROAD, RAILFAN, RMC, TRAINS, MODEL RAILROADER, MODEL MAKER. RLHS Bulletins: Pennsylvania Railroad calendars; locomotive, carbuilders cyclopedias. Train catalogs: PFM, Alco, Westside, Varney, Mantua, Marklin, Rivarossi, Fleischmann. Others: Baldwin locomotive magazines. Specify wants 80¢ SSAE. Ben Smith, 861 Ronnie Lane, Philadelphia, PA 19128.

STEAM SOUND CAM & wiper kit: Bolt on assembly - full instructions - a quality product - will fit any standard gauge steam locomotive. $20.00 postpaid, U.S. funds. Information required; axle diameter in inches or millimeters. Model and wheel arrangement, make of domestic or import locomotive for proper fit. We also install on any chassis design, price extra. ¼" narrow gauge and "G" or Gauge 1 next on development list. Let Charlie Schwarm III of SandJink Models, 3778 Stroschen Dr., Cincinnati, OH 45248, 513/574-0042 give you a good chug.

"THREE LITTLE LINES" by Josie Crum. The 3 lines being Silverton Northern to Animas Forks, Silverton Gladstone and Northerly, Silverton Railroad (the Rainbow Route) over Red Mt. to Ironton; 71 pages over 30 pictures. $4.95 postpaid. Dealers write: Johnny & Barb's Books, P.O. Box 348, Ouray, CO 81427. Phone 303/325-4738.

U.S. RAIL NEWS is the marketplace for the railroad hobbyist and modeler. Nearly 100 separate categories of railroadiana and model railroading classified ads plus news. Subscribe today! $8.75 (one year, 12 issues, 3/c mail); $12.95 (1/c mail). U.S. Rail News, P. O. Box 7007, Huntington Woods, MI 48070-7007.

ARE YOU PLANNING a Steam Powered Tourist Railroad? Independent Feasibility Study may be necessary to interest venture capital, political systems, funding sources, independent or public financing, corporations, limited partnerships. Experienced consultants for local studies now available. National computerized information, reviews and comparisons, equipment locations, available projects, potential cost and profit projections. "Youngereat", 501/253-7329.

LGB WATER TOWER. D&RGW/Colorado & Southern prototype. Factory assembled, painted and weathered by Pola Models of West Germany. Functional - can be used as a decanter for spirits or any liquid. Lower the spout, and it pours! Limited edition of 2900 pieces, numbered with certificate. Typical ultra high quality Pola materials and workmanship - truly magnificent. List price $149.98, postpaid. Send check, credit card to Black Forest Toys, 2265 Westwood Blvd., Suite 629, Los Angeles, CA 90064.

WANTED: Brass locomotives. One piece or large collections. Any scale. Immediate cash available. Send list with asking price in first letter. Contact: Allen Drucke, Allied Model Trains, 10938 W. Pico Blvd., Los Angeles, CA 90064. 213/475-04643.

TRADE: On3 Darr Switches, PS flex track for Atlas O scale track, switches. On3, HO SP brass engines, Lionel for Lionel O scale. James Reno, P. O. Box 13311, So. Lake Tahoe, CA 95702.

On3 BRASS: C-16's painted, RGS #40, Kemtron Shay kit for sale. 2 On3-track modules 8' long, wired and sceniced. Send SSAE for On3 list. Paul Ellis, P. O. Box 2122, Colorado Springs, CO 80901. 303/598-9680, eves.

S & HO FOR SALE. S scale SD 40 T2, new in box, Sunset Sn3 K-28, painted & sound. USH Shay with trucks re-gauged to Sn3 and Grandt drive. HO detail parts, Athern cars and Atlas track. Onboard sound system. Send SSAE for complete lists. S, HO, On3, Sn3. Paul Ellis, P. O. Box 2122, Colorado Springs, CO 80901. 303/598-9680, eves.

FREE CLASSIFIED AD for your show, auction, event, books or literature, restoration services or parts in Collector Marketplace, the new bi-monthly classified ad magazine. Notify Sharpe Publications, 1550 Territorial Road, Benton Harbor, MI 49022. 616/915-2177, before February 25, 1986, for premier March/April issue.

HOn2½: Freelance GEC style locomotive body kit to fit Bachman Plymouth Chassis: $15 postpaid. Chivers Finelines, 49 St. Christines Ave., Leyland, Preston, PR5 2YS, England.

McKENZIE IRON & STEEL CO.
PURVEYORS TO THE LOGGING AND RAILROAD INDUSTRIES
WILLAMETTE (W.I.S.CO.)
TOWER SKIDDER
THIS 200 TON MONSTER, WITH A 100 FOOT TOWER AND 6 ENGINES WAS BUILT IN 1926/7 AS THE
CROWN WILLAMETTE PAPER CO. Nº 3
I'VE DRAWN PLANS FOR THIS MACHINE FROM THE ORIGINAL FACTORY DRAWINGS. 7 SHEETS
200 NUMBERED SETS
ONLY 27 SETS LEFT!
"HO" SCALE $20.
"1/4" SCALE $24.
Our Catalogue is $2.50
Willamette
BILL ROY, P.O.BOX 3695, EUGENE,OR 97403

rail

MOST O GAUGE RAIL LOOKS LIKE THIS . . . *

RIGHT-O'-WAY, THE ONLY SCALE RAIL IN ANY GAUGE LOOKS LIKE THIS . . . *

.148 .125 .100 .081

introduced in 1963. *ACTUAL PHOTOGRAMS OF RAILS.

RIGHT-O'-WAY RAIL AND FLEX-RIGHT IS USED BY MUSEUMS AND OUTSTANDING CLUBS FROM SAN DIEGO TO BOSTON.

Large SSAE for illustrated price list.

RIGHT-O'-WAY P.O. BOX 25735 LA CALIF 90025

ADVERTISER INDEX

A.
American Model Builders Inc. 20
Arias-De-Greiff 21
Arkansas Valley Scale Models 54

B.
Benchmark Publications Ltd. 78
Bob Brass 55
Brass Whistle Inc. 95
H. L. Broadbelt 8

C.
CS Models 95
C.H.B. Models 41
Caboose Hobbies 35
Carson & Colorado 8
Chama Car & Structure Co. 95
Chama Model Shop 11
Charing Cross Station 11
Cheat River Coal & Lumber Co. 11
Cibolo Crossing 17
Collector Marketplace 21
Colorado Railroad Museum 8
Coronado Scale Models 47
Curiosity Sales 10

D.
Depot G Hobbies 6
Des Plaines Hobby Shop 55
Durango & Silverton 88

E.
Erie Limited 93

F.
Finestkind Models 92
Flying Zoo 35
Friends of the East Broad Top 95

G.
Gazette 79
Green Frog Productions 4

H.
Harry's Depot 6
Hi-Country Brass 91

I.
Interurban Press 20
Iron Horse Hobbies Inc. 6

J.
J & M Group Inc. 41
Jesse Jones Industries 92

K.
Kappler Mill & Lumber 41
Keller Engineering 29
M. F. Kotowski 9

L.
Lambert Associates 8
The Little Depot 92
Littletown Hobbies 94

M.
Main Line Models 94
Mainline Modeler 93
Micro Engineering 90
Mixed Trains 94
Model Die Casting 94
Model Railway Supply Co. 10
Models by Roger Schenck 95

N.
N. J. International 93
Narrow Gauge Stuff 94
Northwest Shortline 21

O.
O Scale News, 48/Ft 95
Original Whistle Stop 6
Overland Models 2

P.
P-B-L 99
Peninsula Hobbies 9
Power Systems, Inc. 94
Precision Scale Co. 100
Puffing Billy Models 11

R.
Railhead Publications 17
Railline Co. 95
Rick's Grande Narrow Gauge Car Shop 11
Right-O-Way 98
Rio Grande Models 94
R. Robb, Ltd. 6
Ron's Art Graphics 6
Roy's Train World 10
Bill Roy 98
Russian River Railroad Co. 55
Ryan Equipment Co. 90

S.
S Gaugian 93
Sandy River Car Shops 90
Scale Railway Equipment Co. 55
Sharpe Publishing 21
Sixth Nat'l. Narrow Gauge Convention 49
Sn3 Modeler 10
Strete Hobbies 10
Sundance Publications 55
Sunday River Productions 8
Sunset Models 93

T.
Tall Timber - Short Lines 92
Terminal Hobby 10
Tinkertown Inc. 10
Tomalco 11
Trains of Texas 7
Triangle Scale Models 57
Trout Creek Engineering Inc. 41

U.
Utah Pacific 10, 92

V.
V & T Shops 92
Village Depot 93
Vintage Reproductions 49

W.
W. B. Video Productions 17
Wahkeena Iron Works 55
Wallace Enterprises 10

Address Changes, Mailing Lists, Air Mail, and Other Matters

Moving? We want to be the first to know your new address – but we must have your *old* address too, preferably in the form of your old mailing label. It would be nice if you could put your mailing label on the same card or letter with your new address.

Shhh!!! From time to time we sell our mailing list to carefully selected firms who sell products we believe would be of interest to our readers. If you don't want us to sell your name, just drop us a note or put the words "no promo" on your renewal notice the next time you renew.

Overseas subscribers only! Air Mail subscriptions? We still do not offer them. However, if you absolutely *must* get your **GAZETTE** by air mail, send $25.00 extra for the postage and special handling costs. (That's $50.00 total.) We will endeavor to send your **GAZETTE**s by Air Mail until the rates go up again, at which time you must send more money or we will just extend your subscription appropriately and send it by surface mail.

SUMMER '85 ISSUE

PBL Sn3

PRICE: $1.50 per issue
$5.00 for one year subscription

P.O. Box 749 • Chama, New Mexico 87520

The Sn3 DISPATCH

AUGUST 26, 1985

Hi Guys!

Ahhhhhhhhhhhh, Summertime!!! Great, isn't it?? Up here in the "High Country" we've got Train Whistles emminating from the yards, the pungent smell of Coal Smoke wafting through our doorways in the early morning and early evening hours.. The beautiful azure skys with white, puffy clouds hanging in 'em. T friendly mosquitoes.. (oops..) Frankly, we kinda wish it'd all last some longer, but in t it, if that were the case, we'd probably never get anything done if it did ri a necessity to feel some sort of accomplishment on the old layout ~ ing of accomplishments, we've got some really good ones t

THE "K-27's"! #453 and #455 h

And boyobov
"K-27's" T

SOLD OUT

D&RGW K-27s #453 c. 1950 and #455 c. late thirties

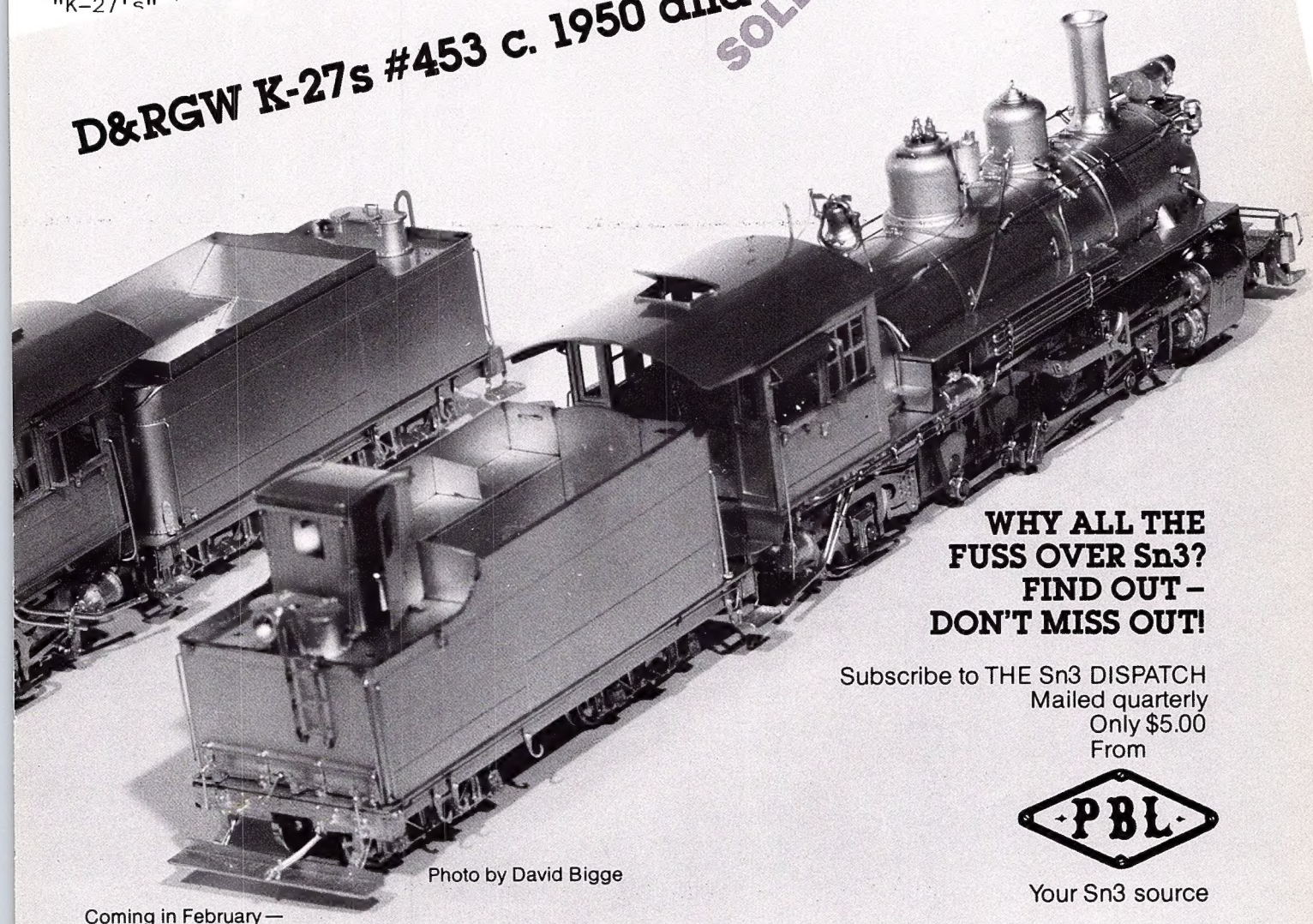


Photo by David Bigge

WHY ALL THE FUSS OVER Sn3? FIND OUT – DON'T MISS OUT!

Subscribe to THE Sn3 DISPATCH
Mailed quarterly
Only $5.00
From

PBL

Your Sn3 source

Coming in February—
CONX TANKERS #22-36. Super-light construction, factory paint & lettering, Kadee couplers installed. $89.95 — Unbelievable!

P-B-L BOX 749 CHAMA, NM 87520 (505) 756-2419

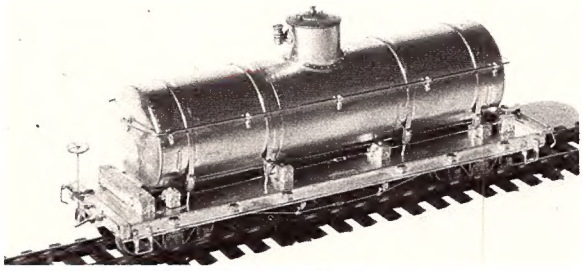
From PRECISION SCALE Co
LOCOMOTIVES DETAILING PARTS
1120-A GUM AVE. WOODLAND, CA 95695

Sn3 PROJECTS TO ARRIVE IN EARLY '86

D&RGW FLANGER OD

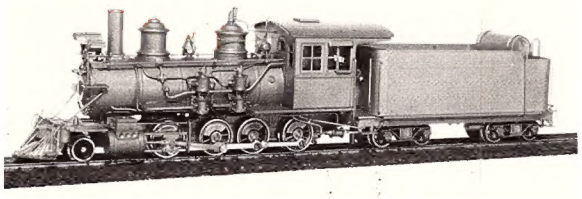
RESERVE #15906 Sn3

HOn3 C.O.N.X. #5



RESERVE #15580 JANUARY '86

D&RGW C-16 #278

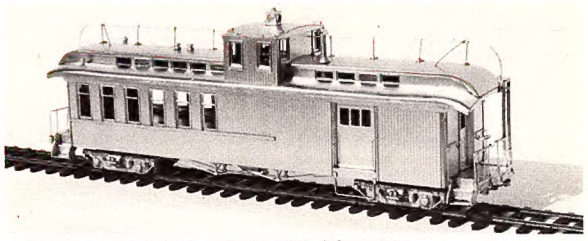


PAINTED #15123 HOn3 NOT PAINTED #15123-1

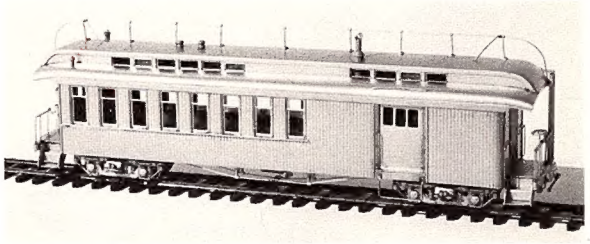
RIO GRANDE SOUTHERN TEN WHEELERS

		Unpainted	Painted
HOn3 *IN STOCK!*	RGS #20	#15418	#15418-1
	RGS #22	#15420	#15420-1
	RGS #25	#15422	#15422-1

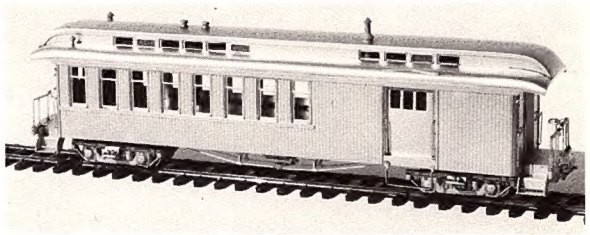
DUE IN JANUARY/FEBRUARY '86
D&RGW HOn3 C-16 #268
PAINTED #15416 NOT PAINTED #15416-1



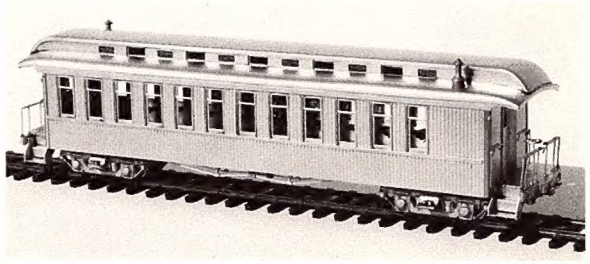
#15913 PAGOSA JUNCTION COMBINE Sn3



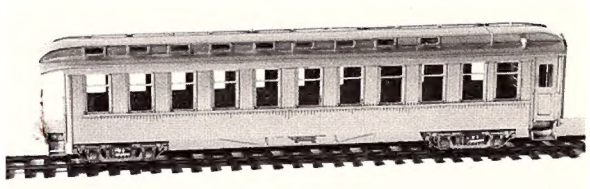
#15914 D&RGW COMBINE #212 Sn3



#15915 SILVERTON COMBINE #212 Sn3



#15923 OPEN PLATFORM COACH #256-321 Sn3



#15924 PARLOR CAR Sn3

ALSO COMING IN 1986 WEST SIDE LUMBER COMPANY SHAY NUMBER #7 IN On3
RESERVE # 15799

THE COLORADO AND SOUTHERN 2—6—0 MOGULS #6, 8 AND 9 IN On3
#6 RESERVE #15579 #8 RESERVE #15581 #9 RESERVE #15022
ALL THREE DUE IN THE SUMMER OF '86

HO/HOn3 PARTS CATALOG #4 IN NOW AVAILABLE — $12.50 PLUS $1.50 S&H

SEE YOUR LOCAL PSC DEALER, FIRST !

master charge OR VISA